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ABSTRACT

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Supervisor(s)	Prof. Toni Ahlqvist		

Abstract

This master's thesis in Futures Studies is connected to an assignment from trade union Akava Special Branches (AE) to create futures images and to ideate new services for the union in 2036. The research question is the following: How did the mixed-methods foresight process conducted online serve the creation of futures images and new services for Akava Special Branches in 2036?

The images and service ideas were cocreated in a mixed-methods foresight process combining elements from Futures Studies and Service Design. The process followed the framework of a participatory futures workshop and was divided into pre-workshop, workshop, and post-workshop phases. Other methodological tools used were futures window, PESTEL-chart, Dator's futures archetypes, survey, and futures image. In addition, moodboards and storyboards, typical Service Design tools, were used to refine the futures images.

The end-products of the process were four futures images (consisting of a narrative, a moodboard, and a storyboard) and seven new service ideas. The images were evaluated by the participants in terms of probability and preferability, and the new service ideas in terms of facility to execute and preferability.

The workshops were organised with AE's stakeholders and took place completely online. The online environment promoted accessibility and resulted with heterogenous groups and a representative sample of the intended focus groups. The MIRO platform enabled cocreation but required a tutorial and basic IT-skills to run smoothly. However, facilitating more than one group with MIRO and Microsoft Teams was challenging. Not being physically present at the same place also hindered the communication between the participants.

PESTEL-chart worked as a cradle for the pre-assignment and then as a tool for shared understanding in the workshop phase. It also fed driving forces to Dator's chart of archetypes. Focusing on the Finnish labour market, AE's organisation and member profile throughout the workshops ensured the micro and macro perspectives in the futures images. The moodboards and storyboards emphasised the communicative value of the images. Evaluation of the images and service ideas after the actual workshops brought an additional layer of validation to the process. The mixed-methods foresight process could be applied to creating futures for any labour union and, as a modified version, for any generic organisation.

Key words	Labour Unions, Mixed-methods, Futures Images, Foresight, Design Thinking

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Tiivistelmä

Pro-gradu on liitoksissa ammattiliitto Akavan Erityisalojen (AE) toimeksiantoon luoda liitolle tulevaisuuskuvia ja ideoita uusista palveluista vuonna 2036. Tutkielman tutkimuskysymys on: miten verkkopohjainen monimenetelmällinen ennakointiprosessi palveli tulevaisuuksien luomista ja uusien palveluiden ideointia Akavan Erityisaloille vuodelle 2036?

Ennakointiprosessissa yhdistyivät tulevaisuudentutkimuksen ja palvelumuotoilun menetelmät. Prosessi noudatteli tulevaisuustyöpajan rakennetta ja oli jaettu esiosioon, varsinaiseen ja jälkiosioon. Muita tulevaisuudentutkimukselle tyypillisiä menetelmällisiä työkaluja olivat tulevaisuusikkuna, PESTEL-taulukko, Jim Datorin tulevaisuusarkkityypit, kyselytutkimus ja tulevaisuuskuvat. Palvelumuotoilun työkaluista tulevaisuuskuvia täydentämään käytettiin tunnelmataulua ja palvelusarjakuvaa.

Prosessin lopputuotteet olivat neljä tulevaisuuskuvaa koostuen narratiivista, tunnelmataulusta ja palvelusarjakuvasta sekä seitsemän uutta palveluideaa. Lisäksi osallistujat arvioivat kuvat todennäköisyyden ja toivottavuuden ja palveluideat toimeenpanon helppouden ja toivottavuuden perusteella.

Työpajoihin kutsuttiin Akavan Erityisalojen sidosryhmiä ja ne järjestettiin kokonaan verkossa. Verkkoympäristö helpotti osallistumista työpajoihin ja edesauttoi edustavan osallistujaotoksen saamista ja heterogeenisten ryhmien muodostamista. MIRO-alustalla oli helppo luoda näyttäviä tehtävänantoja. Alusta mahdollisti yhteiskehittämisen, mutta vaati osallistujilta harjoittelua ja tietoteknisten perustaitojen hallintaa. Fasilitointi MIRO:n ja Microsoft Teamsin välityksellä oli hankalaa, ja ne mahdollistivat keskittymisen vain yhteen ryhmään kerrallaan. Kehollisen läsnäolon puute myös rajoitti osallistujien välistä viestintää.

PESTEL-taulukko toimi hyvin ennakkotehtävässä ja yhteisen ymmärryksen luomiseksi varsinaisen työpajan alussa. Se myös syötti hyvin muutosilmiöitä Datorin tulevaisuuden arkkityyppien taulukkoon. Saman kolmitasoisen katsantotavan säilyttäminen (Suomen työmarkkinajärjestelmä, AE:n organisaatio ja jäsentaso) prosessin eri vaiheissa toi johdonmukaisuutta tulevaisuuskuviin. Tunnelmataulut ja palvelusarjakuvat voimistivat kuvien viestejä. Tulevaisuuskuvien ja palveluideoiden arvottaminen varsinaisten työpajojen jälkeen toi prosessiin lisää uskottavuutta. Monimenetelmällinen metodi olisi sovellettavissa muidenkin ammattiliittojen ja muutoksin toistenkin organisaatioiden tulevaisuuksien rakentamiseen.

Avainsanat	Ammattiyhdistysliike, monimenetelmällisyys, tulevaisuuskuvat, ennakointi, muotoiluajattelu

UNIVERSITY OF TURKU
Turku School of Economics

HUMANITIES IN THE AGE OF ALGORITHMS

A mixed-methods study on the futures of Akava Special Branches in 2036

Master's Thesis
in MDP Futures Studies

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1 INTRODUCTION

1.1 Participatory foresight and the trade unions

Futures Studies and futures thinking empower us to make justified estimates on how the continuums in the past and present will develop and what new phenomena we might encounter. Strategic foresight consists of Futures Studies' interdisciplinary tools and methods put into practice to create artefacts: prototypes, services, suggestions, solutions or even strategies how an individual or an organization could flourish in new possible futures. (Popper 2008; Gordon et al. 2019, 30; Rohrbeck & Schwarz 2013; Slaughter 1999, 87.)

Although futures thinking and foresight have been performed throughout human history, a disciplined and structured strategic foresight was first practiced in the context of national defence in the 1950s. From the 1960s onwards, Organisational and Management Studies and private enterprises started to use the term corporate foresight in connection with activities anticipating changes in the business world and to providing competitive edge compared to rivals. Rohrbeck et al. (2015, 2–4) have pointed out that the terms futures research, strategic foresight, and corporate foresight have misleadingly been used as equivalents to each other (see chapter 3). They do share a view of multiple possible futures, that the drivers leading to the futures can be pinpointed and evaluated and that the futures can be influenced. However, Futures Studies is an umbrella term for the scientific field under organisationally oriented strategic foresight and business oriented corporate foresight operate.

Trade unions, among other non-governmental organisations, have started to apply Futures Studies and foresight practices in order to prepare for different futures. Like other multilayered organisations, the unions are struggling with the overflow of information in connection with the changes in their organisational environment and the accelerating pace of change, taking place in whatever political, economic, social, technological, environmental, cultural or legal spheres. (Ponce Del Castillo 2019, 7–15.)

The unions are challenged internally and externally. In Finland, and in Europe in general, one of the most severe challenges is the decline of union membership among the younger generations. In the 1990s, 84% of the Finnish employees were members of trade unions. Currently, the membership has declined to 67 %. (Ahtiainen 2019, 22; Keyriläinen 2020, 143.) Other changes, for example in citizen participation, in the concept of

work, in demographics, in the level of education, in platform economy, in the level of collectiveness, in the global (work) market, in artificial intelligence and in the social security system challenge the current structure and even the mission of the unions. (See Dufva et al. 2016; Kevätsalo 2005; Jousilahti et al. 2017; Oksanen 2017.)

The labour movement participates actively in the discussion on the futures of Finland and the globe. However, most of the futures work has been conducted by the unions' top leadership and strategic partners and has focused on the macro level of the Finnish labour market (see Jousilahti et al. 2017; Haikonen 2015; HOIVA 2015; SAK 2019; Vallinkoski 2018; Specia 2017). In order to understand what trends, megatrends and weak signals affect each union's organisational environment and especially their members' work and private lives, more collaborative and inclusive foresight is needed.

This research is connected to an assignment from the trade union Akava Special Branches (AE). AE's commission was to create futures images for the organisation in 2036 and ideate new services connected to these futures. The images and services act as a starting point in AE's strategy process taking place in 2021. AE's individual members have predominantly a university degree in humanities, pedagogics, administration, or social sciences and are working in human-centric managerial and specialist roles. With the rapid development in digitalisation, artificial intelligence and platform economy AE has been puzzling over the question: what are the futures of humanism in the age of algorithms?

The images and service ideas were created completely online in participatory futures workshops with the stakeholders of Akava Special Branches: employees, individual members and non-members, representatives of member associations and outside experts. Futures workshops were divided into three parts in which futures window, PESTEL-chart, futures archetypes and surveys were used. In addition to futures narratives, Service Design tools called moodboards and storyboards were applied to create the futures images.

Ultimately, the images and service ideas were evaluated in terms of probability, preferability, and facility to execute. They can also be perceived as end-products of a design research process, during which multiple stakeholders develop existing and co-create new knowledge of, ideas for and solutions to real-life challenges (van Aken & Ramme 2009, 6–7). From Futures Studies perspective, the creation of the images and service ideas binds the study into *pragmatic* research tradition in which actual strategies and recommendations are constructed to reach a preferred future (Malaska 2013, 19–21).

However, the images and service ideas are not the main focus of this research. Instead, the thesis concentrates on how the mixed methodology in online environment can be applied to creating images and service ideas. The theoretical framework combines elements from Futures Studies and Service Design into an integrated foresight process. The reflection of the process and tools is connected to Futures Studies' *syntactical* research tradition with an aim to further widen the applicability of the methods in the field (Malaska 2013, 19–21). Therefore, the research question is the following:

> How did the mixed-methods foresight process conducted online serve the creation of futures images and new services for Akava Special Branches in 2036?

The thesis consists of an introduction and six other sections. In the second section, the study focuses on the history and the current driving forces affecting the labour movement in Finland. Section three presents the theoretical framework and the methodology. Section four illustrates the data collection and analysis. Section five presents the futures images and service ideas created during the workshops following the *pragmatic* research tradition. Section six focuses on the *syntactical* research results by reflecting the process and tools. The section also discusses the credibility, validity, and limitations of the study. Section seven binds the findings into conclusion.

2 CONTEXT OF THE RESEARCH

2.1 Finnish tripartite labour market

Trade unions are in danger of fading if they cannot legitimate their existence especially in the eyes of the young and channel the services according to their needs and values. The unions have been slow to answer to the criticism offered especially by the young precariat (Dufva et al. 2016; Kevätsalo 2005, 36–40; Jousilahti et al. 2017). To put it simply, in order to keep the movement alive, the unions need to attract younger generations to decision making bodies. Andersen et al. (2007, 14) remind that employees' and the employers' commitment to co-develop the labour market has been regarded as one of the cornerstones of the prosperous Nordic welfare society. The unions act as watchmen for the employers who would otherwise have a dominant role at the negotiating table. For the sake of equality in the bargaining process, a vable labour movement is needed in order to counterbalance the game.

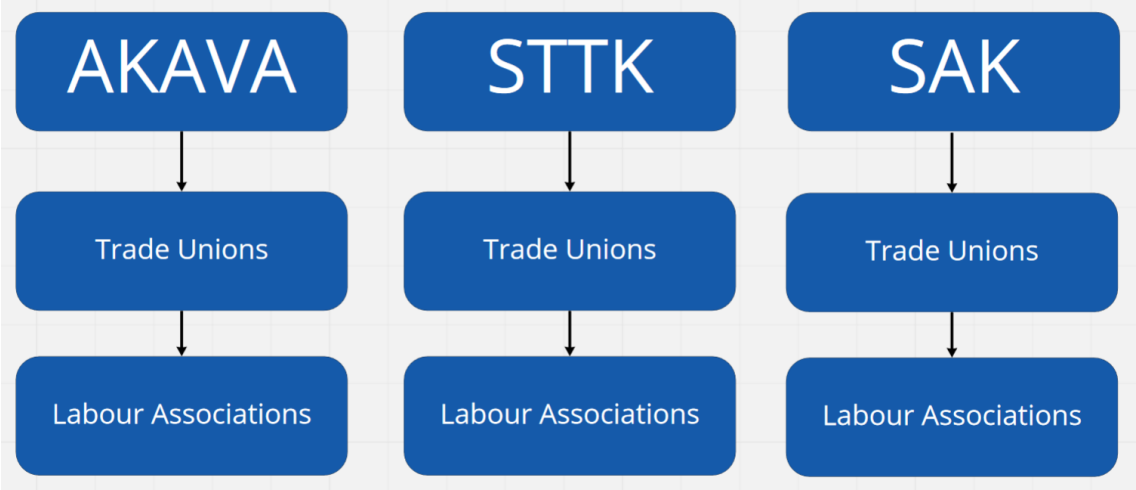

Figure 1 The organisation chart of the Finnish labour movement by national trade union federations

Currently, 67 percent of the Finnish employees are members of trade unions (Keyriläinen 2020, 143). The unions are official associations with a mission to safeguard and improve the interests and working conditions of their members. The unions' activities include political lobbying of their members' interests, negotiating work contracts, offering legal counselling, training and education, and other services. The unions also administrate unemployment funds that are responsible for allocating earnings-related unem-

ployment benefits. There are roughly three main levels in the union structure: labour associations, trade unions consisting of member labour associations and the national trade union federations (figure 1).

Table 1 The number of members by trade union federations in Finland in 2013 and 2017 (modified based on information content from a figure by Ahtiainen 2019, 22)

	Number of members in 2013	% of the number of all members of trade union federations 2013	Number of members in 2017	% of the number of all members of trade union federations 2017	Percentual change between 2013 and 2017
SAK	1 009 000	46.8%	927 000	45.4%	-8.1%
AKAVA	586 000	27.1%	610 000	29.9%	4.1%
STTK	562 000	26.1%	506 000	24.7%	-10.0
IN TOTAL	2 157 000	100%	2 043 000	100%	-5.3%

The three Finnish trade union federations are SAK - Central organization of Finnish Trade Unions, STTK - The Finnish Confederation of Professionals and AKAVA - Confederation of Unions for Professional and Managerial Staff in Finland. Collective agreements covering the Finnish trade markets are concluded between the federations. (Ahtiainen 2019, 18–22; Alaja 2011, 22–23; Lyly–Yrjänä 2019, 219–221.) Currently, SAK is the largest of the federations. AKAVA has grown to be the second largest whereas SAK and STTK have shrunk (table 1).

Historically, Finland has had a concentrated tripartite industrial market in which trade union federations, employer's representatives and the state have cooperated and negotiated issues regarding the Finnish work labour such as salaries, pensions and social benefits. The pacts were called comprehensive income policy agreements. (Alaja 2011, 149–153.) The tripartite system in Finland was developed later than in the other Nordic countries. It was not until the late 1950s and 1960s that the trade unions, the state and the employers had truly found each other as partners. Until the Second World War, the bourgeois political parties in power felt mistrust towards the leftist trade unions largely because of the events of the 1918 civil war and the fear of the Soviet Union. The first time the worker and employer sides acknowledged each other as negotiating bodies was during the 1940 war against the Soviet Union. However, because of the internal struggles within the labour movement and the former, relatively weak position of the Finnish Social Democratic Party in the parliament, a balanced tripartite system was not developed until the 1950s and 1960s. The first income policy agreement of 1968 that started the collective bargaining on how much workers' salaries should rise per year has been considered the milestone of the tripartite system. (Alaja 2011, 149–153; Bergholm 2009, 30.)

The era of comprehensive income policy agreements has been described as a part of a consensus society in which the tripartite system was a political tool used to prevent social turmoil by toadying the trade unions. The more political power shifted to the left in the 1960s, the stronger the position of the trade unions got at the negotiating table. It was also in the employers' interest to cooperate in order to protect their interests instead of being forced to give up by the stronger unions that were backed up by the social democratic government. It was evident that the ties between the social democrats and the unions were tight due to ideological reasons. There were also strong personal and institutional connections between the party and the worker representation. However, also the two other institutionalised parties, the Agrarian Party and the Finnish Coalition Party, regarded negotiations between the employers, the workers, and the state as the best guarantees for internal stability in Finland. (Bergholm 2009, 34–41.)

The tripartite system and the comprehensive income policy agreements held their ranks even during the turmoil of the 1990s recession and all the way to early 2000s. However, in 2007, the newly organised central employer organisation, the Confederation of Finnish Industries (Elinkeinoelämän keskusliitto, EK) announced that, due to global changes in the labour market, the comprehensive income policy agreements were outdated. EK saw no need for cooperation with the employee side. The last time EK returned

to the negotiation table to form collective agreements with the federal employee unions was in 2011. (Alaja 2011, 159–162.)

During the last decade, there has been a change of course on the employers' side when it comes to the willingness to negotiate with the federal unions regarding the collective work contracts for sectors such as forest industry, service industry or information and communication technology. Instead of collective bargaining, the employer side promotes that the agreements should be made at local level between employers and single unions, or even between the individual employee and the employer. As Andersen et al. (2007, 24) conclude, the local level wage bargaining could lead to more flexible labour market and improve the competitiveness of the Finnish business economy. However, the unions have warned that the position of a single union or an individual employee negotiating at local level is much weaker than the position of the employer. The possible change in the collective bargaining in labour markets is a huge structural change in the role of the trade unions. (Helin 2012, 157–159; Eloranta 2020; Akkanen 2020; Liiten et al. 2020.)

2.2 Akavan Erityisalat – Akava Special Branches

Akava is the trade union federation for the white-collar workers and the workers with an academic degree or training. There are 37 member unions and around 610,000 individual members in Akava. Half of Akava's members work in the public sector and the rest in the private sector. Approximately a quarter of the members work in leadership or managerial positions, a quarter in teaching, and the rest in expert or specialist positions. (Alaja 2011, 24; Akava 2021; Salomaa 2016.)

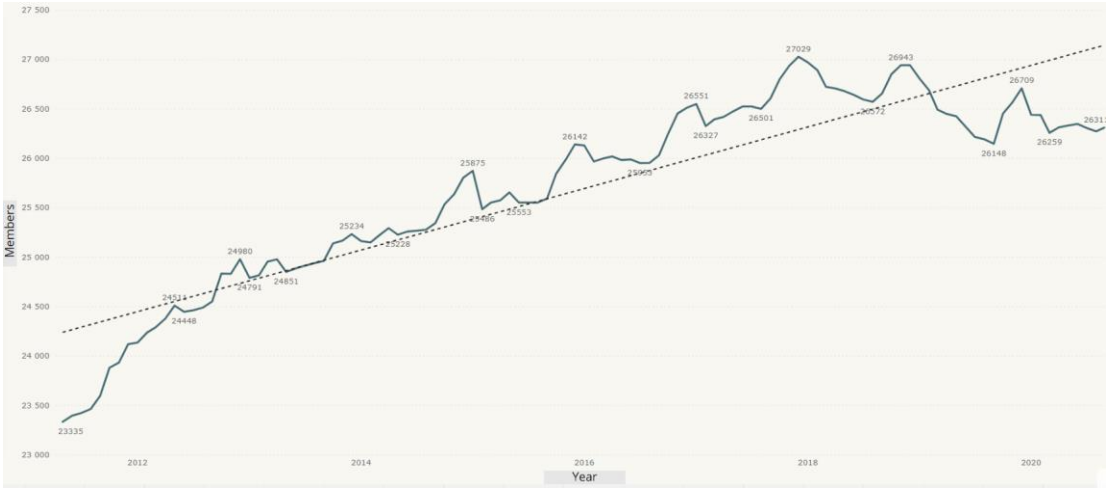

Figure 2 Number of members in the Akava Special Branches' member association 2017-2020 (Modified based on information content from Akavan Erityisalat 2021)

Akava Special Branches is a registered association and a middle-sized member union of Akava. Formally, AE has only 22 members as member trade associations or sub-associations. Informally, the individual members of the sub-associations are also members of AE. Currently, there are almost 22 000 full members and around 5 000 student members in AE (figure 2). The number of members has risen from 20 000 to almost 27 000 during the last 20 years, although the growth of the last 10 years has mainly been caused by new student members and completely new member-associations. From the approximately 22 000 full members, 17 300 are in permanent or fixed term work contracts. In addition to them, there are over 2 000 members that are unemployed, on parental leave or in some way outside the labour market. There are also over 800 entrepreneur, freelancer or self-employed members and over 500 pensioner members. (Akavan Erityisalat 2021.)

The members have versatile professional backgrounds. One common factor is having an expert or managerial position in the field of education, culture, administration, communications, or wellbeing. A shared feature for their work is human centrism, meaning that their work is connected to interaction between people, culture, or organisations. The most common academic degree is a bachelor's or a master's degree in Arts Humanities or in Arts Pedagogy. More than 80% of the members are female. (Akavan Erityisalat 2021.)

Any trade union's main mission is to safeguard the rights of its members in the labour market. This mission is traditionally realized by lobbying the members' interests and offering them member services. The lobbying and safeguarding usually take place at the negotiation table with the employers. At grass-root or member level, this activity is carried out in the form of collective bargaining for better salaries, fair working hours and days off, occupational health care, equal rights and good working conditions. Often, the employee and employer sides reach an agreement that exceeds the requirements imposed by the Finnish trade legislation. In addition to collective bargaining, the unions offer member services, such as legal counselling, individual work contract negotiation, career counselling, training, social gatherings, networking, free insurance cover and discounts on certain services. (Alaja 2011, 22–24.)

2.3 The changing organisational environment of the trade unions

Currently, 67% of the Finnish labour force are union members (figure 3). The rate has grown from 30% in the 1960s to its peak of 84% in the 1990s. Earlier, union membership has been especially popular among industrial workers (Ahtiainen 2019, 18–22; Keyriläinen 2020, 143). Hence, the downfall during the last three decades has partly been explained by the changes in labour market as the third sector has risen whereas the manufacturing sector, including the industry sector, has shrunk and shifted to low-income countries (Kauhanen 2014, 5–6; Waddington 2015). However, multiple other changes in the internal and external organisational environment of the unions also have an effect on union membership popularity.

The megatrends and trends affecting the labour market and the concept of work have been much debated during the last decades. Some of the Finnish trade unions have also

shown interest in practicing foresight in order to study the potential changes in their organisational ecosystem. (See Jousilahti et al. 2017; Haikonen 2015; HOIVA 2015; PAM 2015; SAK 2019; Specia 2017.)

Kevätsalo (2005, 36–40) claims that the futures of labour market will become more fragmented. Income will come from many streams and people can have multiple statuses as workers, students, entrepreneurs, or pensioners at the same time. Permanent work contracts may become scarce. The gap between the winners and the losers of future job markets can become wide. Indeed, there has already emerged loud criticism saying that the unions do not advocate the rights or promote the interests of the people that have the weakest position in the labour market, but rather the interests of the people in permanent secured contracts. Among the young precariat, the popularity of union membership is declining. The unions have been criticised of being run by old men whose confrontative views date back to the previous millenium. (Dufva et al. 2016; Jousilahti et al. 2017; Pentikäinen 2014, 75-80.)

At the same time, there have been vast changes in the concept and demand of work at global and national level. Megatrends like digitalisation, climate change, globalization and demographic change shape the entire industrial market (Andersen et al. 2007, 14–16, 26–27; Kauhanen 2014, 5–6). As the standard of living has risen in the western world, work has a different meaning in people's lives. It is not only a source of income, but also a channel to express oneself and to participate. The drivers for doing work are more value-driven and individual (Jousilahti at al. 2017, 10–11). Unions are offering their members supportive services and benefits, but are people really interested in concrete cost-benefit in exchange for their membership fees? Has the trade movement distanced itself from its roots as an ideological movement fighting for a better world?

The unions are publicly registered associations that are not run and administrated only by paid employees but also by voluntary officials. The associations are mainly led by executive boards and/or delegations that normally appoint sub-committees based on regional or thematic aspects. Unions also appoint members and officials to committees in which the unions cooperate in order to formulate and channel their interests. In turn, these interests have been taken to the collective negotiation bodies (such as the negotiation organisation for the private sector, the Federation of Professional and Managerial Staff YTN, or the negotiation organisation for the public sector, the Negotiation Organisation for Public Sector Professionals JUKO) of the national trade union federations and, eventually, to the negotiation tables of the employees' and employers' federal organisations.

The unions also have their own networks of labour inspectors to supervise that the contracts made with the employers are fulfilled. (Akava 2021; Akavan Erityisalat 2021.)

However, the culture of participation and voluntary work has changed. Committing oneself to a time-consuming public position is not so popular among the young. The rise of the so called fourth sector is connected to the digitalisation of communication and to the rise of social media. The fourth sector has been described as social activity that takes place outside or at the outskirts of traditional institutions and is network-based, co-creative, short-termed, autonomous and context-driven (see Mäenpää & Faehnle 2021). Using social media as a medium, active citizens can find each other and mobilise themselves free from the limits of time and, space and the formal structures of voluntary organizations (Ruuskanen et al. 2020, 22–23). Concurrently, the hierarchical decision making, the confrontative tone of voice of external communication and the outdated public image are burdens to the labour movement (Ahtiainen 2019, 22–26). How will the unions represent the workers and maintain legitimacy if the lines become thinner and the decision making does not attract new members?

Digitalisation and artificial intelligence are changing the paradigms how the economy and societies work. It is not clear how peoples' everyday life is going to be changed as the digital transformation takes place. The old professions consisting of routine manual tasks are being automatised and production lines are expected to be moved to countries with lower trade costs. However, the emerging new technologies also create new professions and new ways to create added value. In platform economy, it is not clear who is the employer and what is the status of the employee or the service provider. However, the human-centric, creative and deeply specialised professions are not easily replaced by algorithms or artificial intelligence.

Kauhanen (2014, 2–10) differentiates five work contents that are affected differently by the AI: *1) expert thinking 2) complex communication and cooperation 3) cognitive routine work 4) manual routine work and 5) manual non-routine work.* Expert thinking requires creative problem solving that is required in many specialist roles. Complex communication and cooperation activities require people skills and human understanding, as for example in coaching and in leadership positions. Cognitive routine tasks are fulfilled by applying predetermined rules. These professions include billing and application handling. Manual routine work includes rule-driven physical tasks, such as work at a manufacturing line. Manual non-routine work consists of physical tasks that require a level of perception, such as driving a vehicle or doing gardening.

Kauhanen (2014) concurs with Brynjolfsson and McAfee (2012, 52–55) that it is much easier to replace the workers in the categories of cognitive routine tasks, manual routine tasks, and manual non-routine tasks with algorithms and robots than workers in the types of jobs that require complex or creative thinking, such as workers in expert position or communication and cooperation activities. Such professions include, for example, teachers, coaches, team leaders, managers, human scientists and designers - all work titles that are typical to the members of Akava Special Branches (Akavan Erityisalat 2021). How will digitalisation and other megatrends directly affect AE's members' ecosystems and how will they shape their work? Will human-centric and inter-human professions prevail? How can the unions safeguard the rights of their members in the incorporeal world of platform economy?

The four legislative cornerstones of trade unions supported by the Finnish political system have been considered the following: 1) *the erga omnia*, 2) *the Ghent model*, 3) *tax-deductibility of union membership fees* and the 4) *automatic deduction of the membership fees by the employer*. *Erga omnia* means the general applicability of a national collective agreement. Via general applicability, even workers that are not members of any trade union enjoy the same work contracts and benefits as workers that belong to a union, that has negotiated a contract with the employer. In practice, ergo omnia safeguards equal rights as the employer cannot apply different work contracts for different employees. (TEM 2020.)

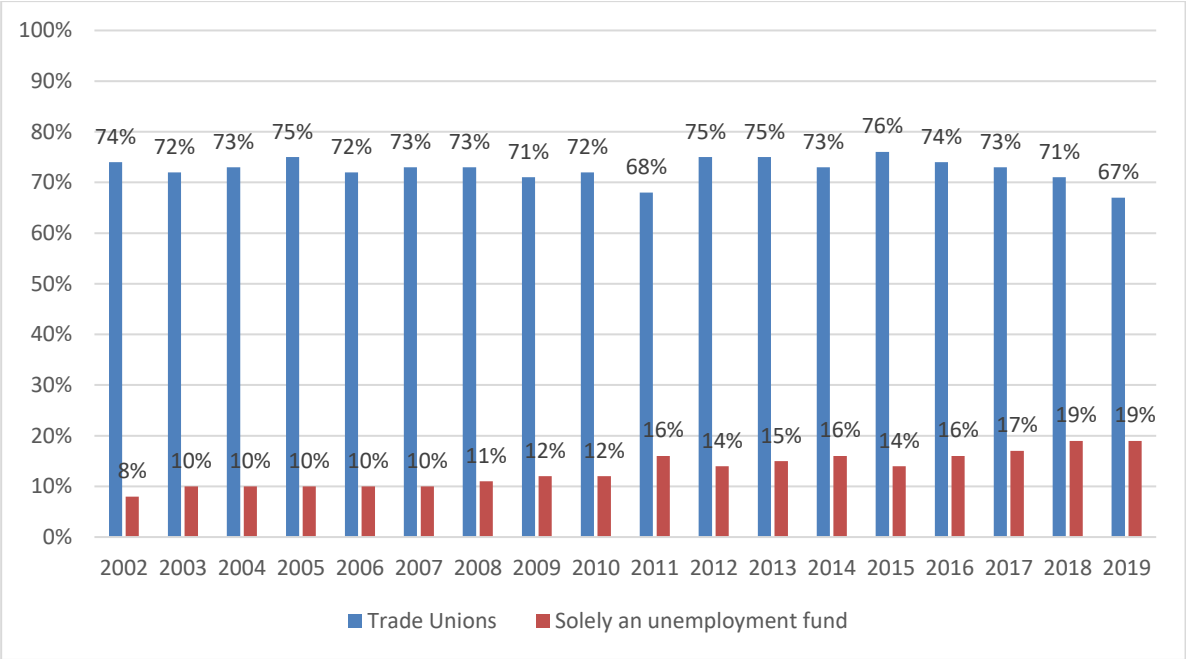

Figure 3 Members belonging to trade unions and solely to unemployment funds between 2002-2019 (%) (modified based on information content from a figure by Keyriläinen 2020, 143)

The Finnish unemployment and pension benefit systems follows *Ghent model* in which the worker pays a voluntary earnings-related coverage to an unemployment fund and, in the case of unemployment or after retirement, gets compensations in accordance to the paid fees (van Rie et al. 2011). Before 1992, the membership of an unemployment fund was linked to the membership of a union. Nowadays, it is possible to belong solely to an unemployment fund. The emergence of the General unemployment fund (Yleinen työttömyyskassa, YTK), not governed by the unions, took advantage of this opportunity. The popularity of YTK is in a steady climb (figure 3). Nowadays, over 440 000 Finnish workers - 19% of the total working force – only belong to YTK and not to a trade union. (Lind 2007, 52–53, 60–62; YTK 2021.)

The average union membership fee is 1-3% of the overall income depending on persons's income and the membership fee system. The fee includes the membership of the labour association, the trade union, the national trade union federation and the unemployment fund. Part of the fee is *tax-deductible* (up to 30% of the paid fees). The deductibility is justified by the services the unions offer that enable the worker to perform his or her duty as a productive tax-paying citizen. (Verohallinto 2021; Lind 2007, 22–23.)

It is common that the membership fees are automatically deducted from the employees's salary by the employer and, in turn, submitted to the unions. Especially the state, municipalities, congregations, non-governmental organisations and universities automatically collect the fee from the worker's salary and transfer the membership fees to the unions. However, only half of the private companies do the same. If the fee is not automatically deducted, the employee must calculate and pay the fees manually accordingly to his or her monthly wages. It is an easy task if the fee is fixed or if one has only one source of income. It gets complicated if the union is collecting a percentage of the income, if the salary differs month to month, or if the works has multiple sources of income. (Andersen et al. 2007, 105–107; Alaja 2011, 147–160.)

During the last years these structural cornerstones of the trade movement have been challenged. There has been public debate to shift from *erga omnia* to more local and workplace-based contracts, to extend *the Ghent model* to all workers regardless of their unemployment fund membership, to scrap the *tax-deductibility* of the membership fees and to stop collecting the union membership fees by the employers. (Honkanen 2015; SAK 2018; Eloranta 2020.) How would the removal of these four pillars affect the attractiveness of the unions?

3 THEORETICAL FRAMEWORK AND SELECTIONS

3.1 Strategic foresight in the context of Futures Studies

Wendell Bell argues that Futures Studies strives for a better world and life for humans and other beings alike (Bell 2009, 73). Mika Mannermaa concurs that from possible, probable, and preferable futures, the aim for preferable ones makes Futures Studies an impact-oriented science (Mannermaa 1986, 659). Pentti Malaska divides Futures Studies into three different spheres: *syntactical, semantical and pragmatical*. Syntactical orientation concentrates on the methods of Futures Studies. Semantical approach focuses on substance matters, issues, and concepts relevant to Futures Studies. Pragmatical research strives for preferred futures in the form of concrete policy recommendations, action plans and strategies. Rarely any research in Futures Studies lands solely in one of the categories but contains elements of all the orientations. (Malaska 2013, 19–20.)

This thesis falls into two of the categories. It is an assignment given by AE in order to create futures images and other artefacts to help its strategy process, and as such it follows the *pragmatic* research line. The pragmatic research findings are found from section five. However, this research focuses mainly on how the used mixed-methods approach serves the creation of the end-products. This goal binds the thesis into the *syntactical* research orientation. The reflection of the process is found from section six.

Foresight could be described as a way to apply the methods and the tools of Futures Studies to create ideas of probable and preferred futures (Kauppinen et al. 2003, 244). Naturally, grasping the possibility for change requires action and agency from an individual or an organisation. Kuosa (2012, 16–17) differentiates foresight from Futures Studies by arguing that foresight is not so focused on value rationality and that, as a practical orientation, foresight's timeframe is shorter (3-15 years). As the focus is closer to the present, it delivers more accurate information on the possible changes in the surrounding environment. Already ongoing continuums are simpler to anticipate, so the images of the near futures are more probable than the images of long-term Futures Studies (10-50 years).

Strategic foresight is a widely used term in business life and in the public sector. It uses Futures Studies methodology and tools to anticipate the near future in order to improve the present strategic decision making (Gordon et al. 2019, 30). Rohrbeck and Schwarz (2013) point out that applying strategic foresight strengthens the understanding

of and the capacity to respond to change, the potential to influence other agents and the collective learning of the organisation. Therefore, the use of strategic foresight is to reach the preferred futures and evade the unpreferred ones.

Richard Slaughter (1999, 287) defines strategic foresight as:

> *"the ability to create and maintain a high-quality, coherent and functional forward view and to use the insights arising in organisationally useful ways; for example: to detect adverse conditions, guide policy, shape strategy; to explore new markets, products and services. It represents a fusion of futures methods with those of strategic management."*

However, as strategic foresight is a highly impact-oriented practice and underlines the individual's or organisation's potential for change, it rejects the notion of predictable futures. How could one predict a single future or multiple futures as so many of agents are in constant interplay to create infinite numbers of new possible outcomes? Instead, strategic foresight underlines that, we can only prepare for possible, probable, even unpredictable, futures with the agency we hold. (Gordon et al. 2019, 34.)

Strategic foresight processes are demanding, complex and context-bound and do not necessarily succeed in implementing a winning strategy for an organisation. Rohrbeck (2011, 2–4) argues that there are three main reasons why organisations fail to see or grasp changes in their environment. Firstly, the *organisational environment is changing* more rapidly in the inter-connected social, technological, political, and economic global system. At the same time, the overflow of information of the changes blur the big picture. Secondly, *ignorance* regarding the changes or possibilities can be caused by multiple reasons, most common ones being lack of interest, lack of capabilities, lack of resources for strategic planning, or poor internal or external information flow. Thirdly, *resistance to change* can halt the needed actions even if it is self-evident that something should be done. This could result from complex organisational structure, self-protectionist organisational culture or collective cognitive incapability to let creative destruction happen.

3.2 Similarities of foresight and service design processes

This master's thesis is connected to an assignment from Akava Special Branches (AE) to create futures images of its organisational ecosystem and ideas for new services in 2036. The images and ideas are to be used as stimuli in its strategy process. The ecosystem

refers originally to biological systems but is nowadays widely used as a term in other sciences, including design sciences. By ecosystem, this thesis refers to AE's internal and external structures, stakeholders and agents affecting the organisation. In AE's case, the ecosystem constitutes of its employees, member labour societies, individual members, competing trade unions, law makers, government ministries, service providers and other stakeholders, for example. The challenge is to understand the constant interactions of these entities on different levels such as organisational culture, legislation, economics, politics, the members' way of working, social benefit system etc. (Heinonen et al. 2010, 530–535; Grönroos & Gummerus 2014, 84–92.)

The goal of the created futures images and potential services is to give stimulus in order to build a new strategy for AE. That strategy can then be used as a roadmap for aiming to the preferred outcomes and for evading the unfavourable ones. Therefore, an integral part of the future images is the agency of AE in connection with changes in its organisational and its members' ecosystems. As described above and according to Malaska, this part of the research follows the tradition of *pragmatic* Futures Studies and more precisely of strategic foresight.

The foresight process follows the research approach of design sciences, which in turn is connected to a wider concept of design thinking. Design, as a word, has been used to describe the process of planning tangible products with aesthetical value. However, the scope of design has broadened to services, strategies, systems, and organisations. Design thinking is a mindset to develop better or new solutions and to create added value to customers, members, or end-users. Service Design applies service thinking in concrete design processes. Characteristic to design processes are participatory methods, holistic view on human needs, iteration, prototyping, systemic view, and future orientation. Like Futures Studies, Service Design is a maturing field expanding its theory and practise. Futures Studies and Service Design also share the impact-oriented approach to design and improve services, organisations and, in a wider picture, the world. (Miettinen 2014, 13; Curedale 2013, 16; Sangiorgi & Prendiville 2014, 61.)

Gordon et al. (2019, 30–31) have argued that, in addition to the impact-oriented nature, the other crucial overlapping aspect of these fields is that all the products and services planned as a part of design processes take place in the future. Design science research is trying to solve real life problems or create new solutions in the future by novel artefacts, such as strategies, services, models, or roadmaps (Sangupamba Mwilu et al. 2016, 111). According to Niiniluoto (2009, 63), the design sciences share the same aim

as foresight: to describe the practical path to probable and preferred outcomes in the future. One could argue that as foresight is an appliance of Futures Studies' methods in practise, Service Design is applying design thinking in design processes.

The strategic foresight and service design processes resemble each other. This is evident when comparing two classical foresight models of the Association of Professional Futurists (AFP) or the 3Ps model with a wide-spread service design process model of Stanford Design School (see Stanford d. School 2010). According to Rohrbeck and Kum (see 2018), the three-step 3P-model is a simplified version of the AFP's six-step Strategic Foresight process.

Figure 4 The AFP's foresight process and the six foresight competencies (modified based on information content from a figure by Hines et al. 2012, 130)

The AFP's foresight competencies are 1) framing, 2) scanning, 3) futuring, 4) visioning, 5) designing and 6) adapting (figure 4). Firstly, the goals of the project and the organisational environment are structured or *framed* in a meaningful and coherent way. Secondly, the prevailing changes in the organisational ecosystem and horizon are *scanned*. Thirdly, the possible impacts of the changes to the organisational ecosystem are *envisioned* and possibly categorised with meaningful tools. Fourthly, the preferred and unpreferred outcomes are *visioned* and targets set according to the outcomes. Fifthly, the

actions and paths leading to the preferred targets are *designed*. Lastly, as the actions are taken and the organisation has *adapted* to a new situation, the strategic process continues in an iterative way to generate yet more alternative futures. (Hines et al. 2012, 130–132.)

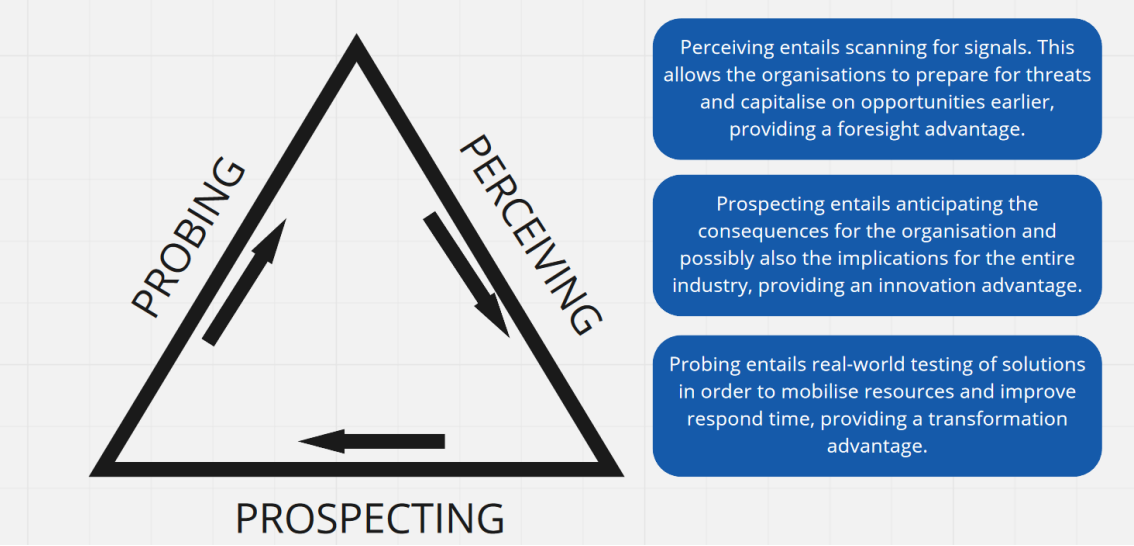

Figure 5 3Ps foresight process divided into perceiving, prospecting, and probing (modified based on information content from text and figures by Rohrbeck & Kum 2018, 6–7)

In their model of 3Ps, Rohrbeck and Kum (2018, 6–7) simplify the foresight process into three phases: *perceiving, prospecting, and probing* (figure 5), leaving the problem framing and structuring out of the foresight process. Similar to the AFP's scanning phase, they start the process with *perceiving* futures information, such as trends, megatrends or weak signals in the organisational environment. *Prospecting* addresses to collating and making sense of the information and signals an intent to anticipate how the signals from the past and the present will continue in the future. Prospecting is very similar to futuring in the AFP's process. *Probing* refers to planning of actions based on the views, visions, and conclusions of prospecting. In AFP's model, designing and adapting are equivalents to probing. It is during probing that the strategies and "artefacts" are created (Gordon et al. 2019, 34–37).

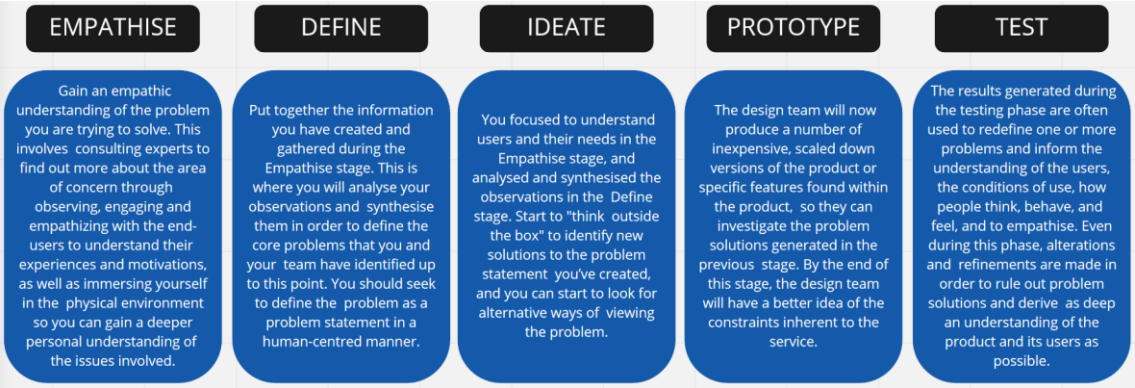

Figure 6 Stanford Design School's Service Design process divided into five steps (modified based on information content from text and figures by Stanford d.School 2010, 4–7)

Stanford Design School's Service Design process (2010, 4–7) is divided into five commands: *empathise, define, ideate, prototype* and *test* (figure 6). *Empathising* underlines the importance to understand the customer's or end-user's needs and ecosystem when designing. *Defining* refers to pinpointing the main problem or the need that the service is trying to solve or satisfy. *Ideating* refers to the process of creating different solutions or services. *Prototyping* is a crucial part of a design process where the most promising and feasible solution or solutions are modelled in real life. *Testing* of the prototype is an iterative process where the end-product is finalised before being launched or put to mass-production.

Table 2 The integrated foresight and service design process and used tools in each step (modified based on information content from a figure by Gordon et al. 2019, 38)

Stage	Goal	Used tools in AE's case study
1. Empathise and Perceive	Attend to user observation and empathy, but also expand observation to include scanning the full force-field of change factors in the external environment (while addressing the limits of perceptual frames in both activities).	Filling in driving forces to *PESTEL-chart* from three levels: the Finnish labour market, AE's organisation and AE's members.
2. Prospect and Define	Interpret the evidence from the Empathise and Perceive phase, to build an informed understanding of the present, both from the user's point of view and with reference to macro-externalities and potential leap solutions. Advance this understanding into alternative views of the future non-predictively, within which to consider the design problem. Therein develop a robust view of plausible future contexts that the design thinking process is addressing. Once this basis is achieved, define the design problem to be addressed or opportunity pursued.	1a. Combining the driving forces of individual participants into *combined PESTEL-chart* of each group. 1b. Creating a shared understanding by clustering and voting of the driving forces in PESTEL-chart. 2. Deducting the most central driving forces to *Dator's futures archetypes chart*. 3. Applying a three-layered *concept canvas* to describe the future in terms of the Finnish labour market, AE's organisation and AE's members.
3. Ideate	Develop a wide range of solution ideas to the defined problem or opportunity. In addition to standard design ideation, use non-predictive alternative views of the future, containing alternative users and different needs, in order to stimulate and enhance ideation.	Applying the *concept canvas* to ideate new service ideas in connection to the created futures.
4. Prototype	As before, narrow down the product or service ideation to one prototype or to a small number of prototypes.	Voting by *survey* on the facility to execute and preferability of the created service ideas. Prototyping the most promising ideas is left to AE's consideration.
5. Probe and Test	The iterative probing, testing, and refining step proceeds as before.	Tools selected during AE's strategy process not described in this study.

Gordon et al. (2019, 37–39) have combined the AFP's and the 3Ps foresight processes and the Stanford Design School's service design process into one integrated foresight process (table 2). They divide the model into five steps 1) *empathise and perceive*, 2) *prospect and define*, 3) *ideate*, 4) *prototype* and 5) *probe and test*. With their process, Gordon et al. offer support to create alternative futures and artefacts that fulfil end-user needs and create added value in those futures.

Gordon et al. (2019, 30) point out that the purpose of foresight and the integrated foresight process is first, to create non-predictable and non-extrapolative futures. Second, to help vision futures that are also surprising, not only the most probable and most likely

to occur. Third, the futures support us to make strategic decision and develop artefacts today that fill fit for the world of tomorrow.

This thesis examines the organisational ecosystem of Akava Special Branches. Therefore, organisational and management studies are a relevant scientific field to study the topic. Traditionally, these fields have been approached either from the perspective of humanities or natural sciences. However, lately a design science approach has introduced actor perspective and solution-orientation to Organisational and Management Studies. (van Aken & Romme 2009, 5–6.)

The natural science perspective (also called as a positivistic science approach, see Voros 2008) perceives organisations as empirical objects with attributes that can be labelled systematically. The data is pre-dominantly quantitative, as opposed to qualitative sources used in humanities. On the other hand, humanities examine the organisations by the testimonies of their members. Humanities concentrate on how the members experience and reflect the surrounding reality. Both approaches under organisational and management studies are descriptive as they explain the existing or existed constructions. However, neither of them will grasp the normative challenge of asking "what should be done?" (van Aken & Romme 2009, 6.)

Banathy (1996) uses the term artefacts in another sense than, for example Sangupamba Mwilu et al. (2016), who described the end-products of a foresight process as artefacts. For Banathy, organisations are also artefacts: unique structures created and developed not only by the surrounding circumstances but by their members and vast networks of stakeholders. He states that design sciences are interested in the actors and their agency that shapes the organisations and especially in how solutions are created to the problems and challenges the organisation encounters. Simon (1995, 248–252) concurs that design science approach is concerned on how systems or practises should be built or how they could be improved. Therefore, the main idea of design sciences is to actively develop knowledge to support designing a solution to a problem (van Aken and Romme (2009, 7-9).

The end-products of AE's futures research assignment are the futures images of the union in 2036 of which probability and preferability were also evaluated. In addition to the images, the respondents also evaluated the facility to execute and preferability of new services ideated during the process. One of the main challenges of any service organisation is, how to constantly develop its services and functions to create better value for its customers or, in AE's case, its members. From the angle of design sciences, the artefacts

created during the workshops and rated afterwards offer potential solutions to the questions of value creation.

3.3 Research through integrated foresight model

Data gathering is a part of AE's foresight process and can be perceived through Gordon et al's (2019, 37–39) integrated foresight model described in the previous section. The model consists of five stages: *empathise and perceive*, *prospect and define*, *ideate*, *prototype* and *test*. As seen in figures seven and eight, the different steps of the research process do not ideally fit into only one stage of the integrated foresight process and there is iteration between the steps.

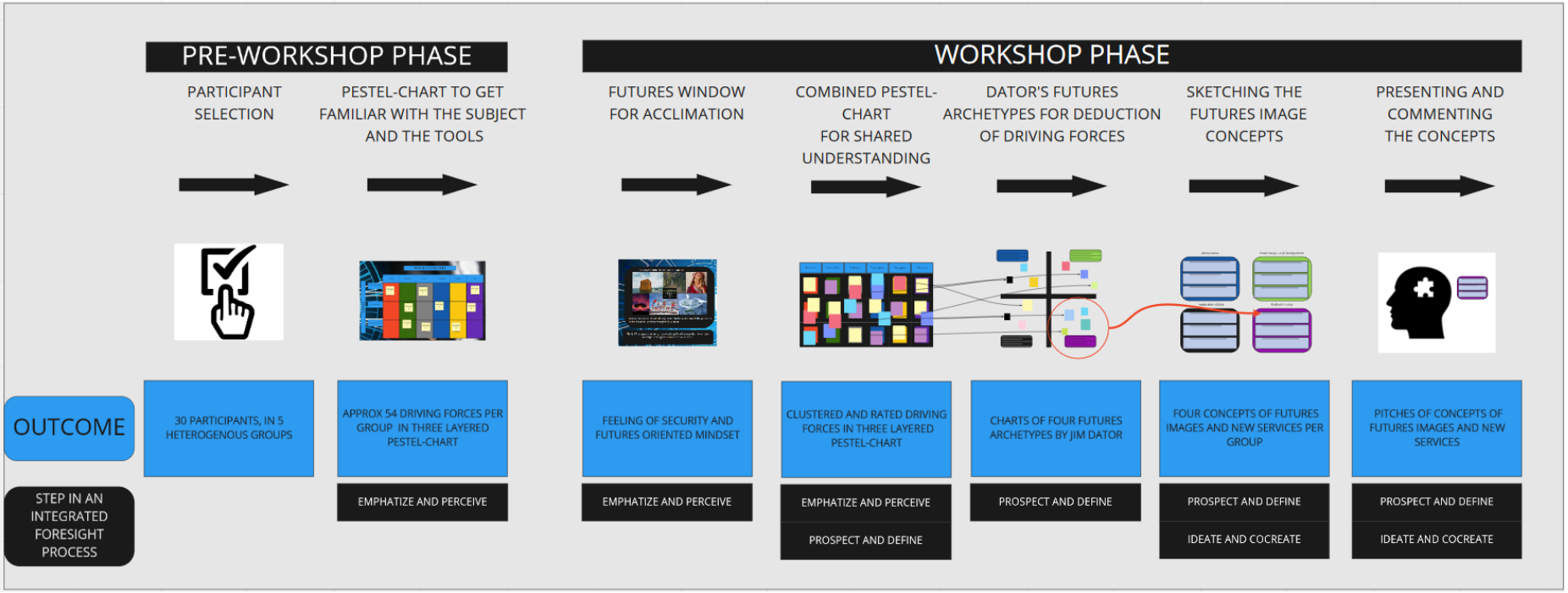

Figure 7 A mixed-methods integrated foresight process: pre-workshop and workshop phases

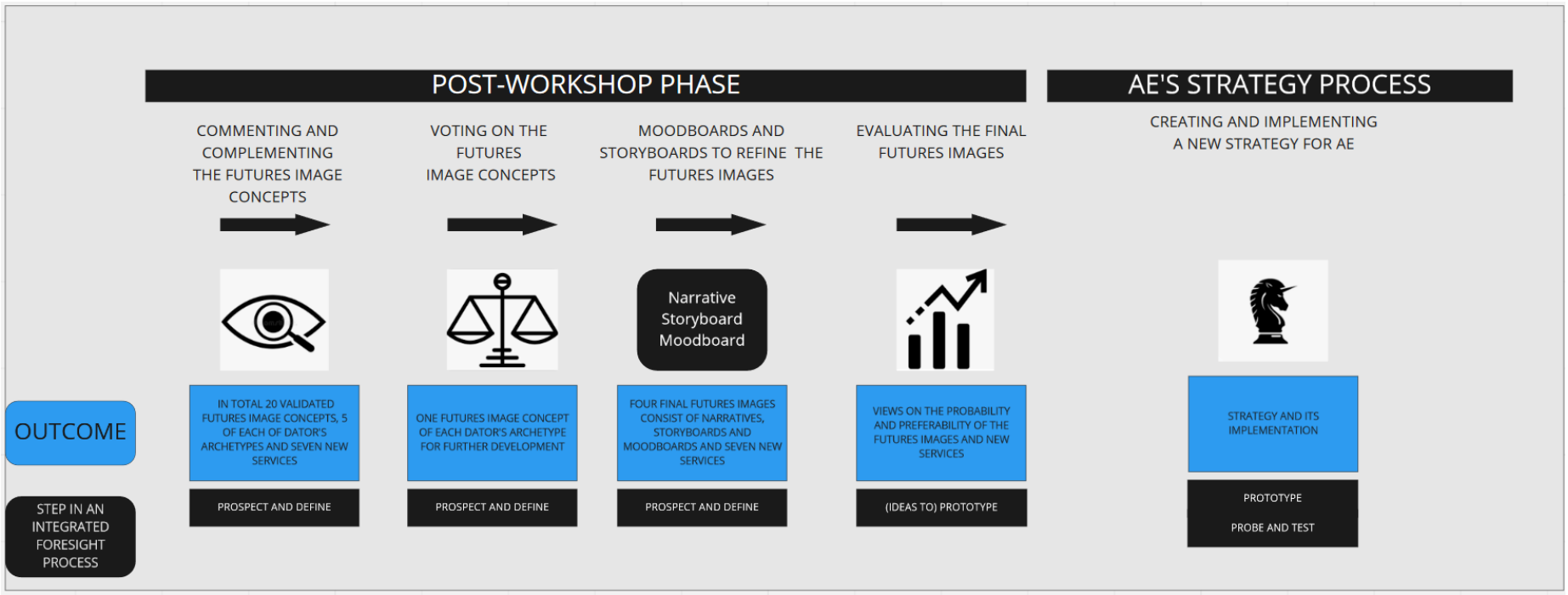

Figure 8 A mixed-methods integrated foresight process: post-workshop phase and AE's strategy proces

During the pre-workshop phase, the multiple stakeholders of AE *perceived* the driving forces (in a broad sense: potential changes in the organisational environment, continuums and potential disruptive events) in the organisational environment of AE. The participants also *empathised* how the changes could affect AE using an online PESTEL-chart that was divided into three levels: the Finnish labour market, AE's organisation and AE's members.

During the workshop phase, the stakeholders presented the driving forces collated to each group's combined PESTEL-chart, created a shared view of the forces and *prospected* and *defined* which of the forces were the most relevant to AE in the three levels mentioned above. Next, they reflected on how different forces would manifest in the possible futures of AE in 2036 using Dator's chart of futures archetypes (Dator 2009). After deducting the most important driving forces to archetypes, the participants used a concept canvas to define, how the futures would manifest themselves in the levels of the Finnish labour market, AE's organisation and AE's members. In addition to the images of the futures, the participants also *ideated and co-created* artefacts: potential new services in accordance with the created futures images of AE in 2036. These were also filled into the concept canvas.

During the post-workshop phase, the participants voted on which of the created futures image concepts would be refined as final futures images of the foresight process. The researcher developed the selected images by writing longer narratives and by creating storyboards and moodboards based on the data gathered during the workshop phase.

Eventually, the participants evaluated the probability and preferability of the refined images, including the new service ideas by voting in a survey. Even though, the most valued new services were naturally the most promising ones to be *prototyped* by AE, this master's thesis does not focus on the actual *prototyping*, *probing* or *testing* phases of the integrated foresight process. It is up to AE to use the futures images in its strategy process and test the suggested artefacts while improving its member services.

3.4 The Futures Studies research tools used in the process

The foresight process consisted of multiple research tools combined. The participatory foresight process followed the framework of a futures workshop. The main tools used in

the workshops were PESTEL-chart, futures window, Dator's futures archetypes, and survey. The end-products of the process were futures images divided into futures narratives, moodboards and storyboards.

3.4.1 Futures workshop

The foresight process loosely followed a classic futures workshop format and was divided into pre-workshop, workshop, and post-workshop phases. Futures workshop with its numerous variations is one of the most commonly used methods in participatory futures studies. It brings together people from heterogenous backgrounds and utilises their knowhow and skills to develop a solution or to solve a shared problem. Austrian Robert Jungk is considered as the original inventor of the method. He used it to engage with citizens to cocreate preferred views of the future. The method can easily be used verbalise and solve real-life problems. It endorses creativity, collaboration, learning by developing, critical thinking, and equality. As documenting the work is an integral part of the process, it also promotes data gathering. (Dator 1993; Lauttamäki 2016; Slaughter 1991.)

Jungk and Müller (1987, 115–121) divide the futures workshop into four stages:

1. Preparation phase – planning the goals, methods, and infrastructure of the workshops
2. Critique phase – introducing the problem and examining it thoroughly
3. Fantasy phase – co-creating the alternative futures and solutions
4. Implementation phase – making plans based on the envisioned futures and assessing the practicality of the solutions.

As stated above, creativity and mixing different tools during the futures workshops was highly encouraged already by Jungk and Müller (1987, 61–63). Arts and music are commonly used to acclimate the participants to futures thinking and detach them from the perspective of business-as-usual. The use of games, roleplaying even meditation have been utilised to foster creativity and to break the social ice during the workshops (Heinonen & Hiltunen 2012).

3.4.2 PESTEL-chart

A PESTEL-chart is a commonly used tool in futures studies and other disciplines alike. It is applied to differentiate or to categorise phenomena from political, economic, social, technological, environmental and legislative perspectives. It has numerous alterations and the legislative category is often replaced by culture. (See for example Gordon et al. 2019; Yüksel 2012.)

The PESTEL-chart was applied during the pre-assignment phase to introduce the participants to the subject and during the workshop to create a shared understanding of the driving forces affecting Akava Special Branches. It was divided into three levels: the Finnish labour market, AE's organisation and AE's members.

3.4.3 Futures window

Before starting the actual cocreation during the workshop phase the participants were acclimated to a creative mood using a futures window. Futures window is described by Heinonen and Hiltunen (2012, 248–249) as a tool to inspire futures thinking by using signals that feed our senses. The windows can consist of sound, visual content, even smells and tastes. Futures windows have been used for example in public spaces to represent how the place would look in the distant future. However, it is also an excellent tool to distant participants from their daily worries in a futures workshop. Futures window can be perceived as a gateway to futures oriented and creative thinking especially if the spectator or participant is in a hectic and distracted mode.

3.4.4 Futures archetypes

The creation of the futures and new service ideas included fitting driving forces from each group's combined PESTEL-chart to a chart of four futures archetypes. The method of futures archetypes was created by Dator as a light and easy tool to co-create futures images or scenarios. As early as 1970s, Dator noticed that people's stories and visions on the effects of social change can be simplified and classified into same kinds of storylines. Dator argues, following the theories of Carl Jung, that as social beings, humans have a collective understanding of meanings and symbols. Even more, people share an archetypal memory and tend to see the road to a certain outcome similarly regardless of the

cultural sphere they come from. During his extensive career as a futurist, he has discovered that also the futures images and scenarios follow the same archetypes of narratives. Dator has named these four archetypes: continuation, limits and discipline, decline and collapse and transformation. The method is widely used especially if a large group of people need to create futures in a short period of time. (Dator 2009; Fergnani & Jackson 2018, 2–4.)

Continuation resembles the business-as-usual scenarios. The narrative describes how the official actions will bring intended results and how the continuums follow the projected lines. Limits and discipline describe a future where rationality and moderation have won. This has resulted in a rule-based and possibly a value-driven society. Decline and collapse challenges the idea of continuous growth. Following the storyline, the current unsustainable way of life has hit the wall, or a disruptive event has forced us to change the way we live. However, a new order will arise which is not necessarily good for all. In transformation, the whole operational logic has changed. It can be a result of a disruptive event or revolutionary technology. The main idea is that something has touched every level of society and the old way of life is profoundly changed. (Dator 2009, 6–8.)

3.4.5 Futures images: narratives, moodboards and storyboards

The futures images created for AE consist of narratives, moodboards and storyboards. Futures images' purpose is to vision alternative futures. According to Fred Polak (1973, 10), futures images are "systematic projections toward future which are influenced by numerous factors, such as science, religion and values in the sociocultural context. They are mental constructions including future orientated concepts, assumptions, perceptions and beliefs, but also observations and facts about the present".

Like scenarios, the applicability of futures images is to stretch the mental window of opportunity and to empower people to make decision today to reach preferable futures tomorrow. To be able to envision alternative, even radical courses of action, the images or scenarios need to differ from each other and from the present moment. The distinction between scenarios and futures images is that, as scenarios portrait the actions from a certain point in time to the futures, a futures image is a snapshot of a time in the future. The images are empathic tools. The spectator needs to be immersed with the other reality. To achieve this, the narratives and other supporting communicative tools must be created from an end-user perspective. (Rubin & Linturi 2001, 269–271.)

One could argue, that in the context of the created futures images, the moodboards and storyboards are examples of futures windows studied by Heinonen and Hiltunen (2012). The moodboards and storyboards are used to inspire the spectator and to deepen the understanding of the narratives just as futures windows are helping people to picture the futures. A moodboard can consist of audio-visual elements that amplify the intended message. It helps the spectator to reach an intended emotional state (Tomitsch et al. 2018, 92–93; Stickdorn et al. 2018, 239). Storyboards are narratives that combine visual and textual elements. In service design, storyboards are most commonly cartoons that highlight the interaction between the customer and the service-provider (Tomitsch et al. 2018, 279). In the context of the futures images, moodboards were used to amplify the message of the images, and storyboards were used to highlight how individual members would use AE's services in the future.

3.4.6 Survey

Surveys are an economical method to collect data from a large sample. They are widely used in different disciplines. The clarity and length of the survey contribute to a high response rate. It is vital to test the templates before the actual survey takes place. Often the surveys are divided into quantitative and qualitative questions and can contain closed or open question. The strength of open questions is having more in-depth and subjective insights from the respondents. Closed questions produce more scalable answers. (Vehkalahti 2008.)

In the case of the futures images, a two-round survey was conducted. First the respondents selected one futures image from each of the futures archetypes by Dator to be refined further. During the second round, the respondents evaluated the probability and preferability of the selected images and facility to execute and preferability of the service ideas. In the end, the surveys produced quantitative data of the probability and preferability of each image and new service idea. The survey was therefore used to emphasise the pragmatical nature of the research described in section two (see also Malaska 2013, 19–20).

4 DATA AND METHODS

4.1 A mixed-methods approach

This master's thesis is a part of an assignment to create futures images for Akava Special Branches in 2036, to evaluate their probability and preferability and to rate ideas for new services. The thesis examines whether the applied mixed-methods approach is suitable for creating futures images online. The different methods and electronic tools were selected and fitted together to fulfil the requirements of creating the futures images in a participatory manner without being able to meet face-to-face. This tailoring is nothing new. As an interdisciplinary science, futures studies can apply whichever method necessary to answer the research questions (Malaska 2001, 230–231).

The foresight and data collection process loosely followed a classical *futures workshop* framework (Jungk & Müller 1987). The process was divided into pre-workshop, workshop, and post-workshop phases (figures 7 and 8). In total, three online futures workshops and a two-round follow-up survey were conducted. During the pre-workshop phase a modified *PESTEL-chart* (a chart divided into political, economic, social, technological, environmental and legal sections) was used to help the research participants to systemically reflect on the driving forces in AE's internal and external organisational environment.

In the workshop phase, *futures window* was used to acclimate the participants to futures thinking. Then a shared understanding was created by combining the individual PESTEL-charts of the pre-workshop phase into each group's collective PESTEL-chart. The forecasting of futures images and potential new services was done using Dator's *futures archetypes* methodology (Dator 2009). Each group fitted or deducted the driving forces from the shared PESTEL-chart to Dator's chart of futures archetypes and then created narratives of the futures images and new service ideas.

During the post-workshop phase, the participants answered to *a two-round survey*. In the first round, they selected the most interesting futures image from each of Dator's four futures archetypes. During the second round, the participants rated each futures image's futures statements in terms of probability and preferability, and the services ideas in terms of facility to execute and preferability.

The gathered data was predominantly qualitative apart from surveys conducted in the post-workshop phase. Although the agreed end-products of AE's assignments were the

four futures images, each consisting of a narrative, a moodboard, and a storyboard, statistical data was also produced regarding the probability and preferability of the images as well as the preferability of and facility to execute the service ideas.

4.2 Pre-workshop phase

4.2.1 Futures workshop as the framework of the process

The foresight process followed the framework of futures workshop that constitutes of the following phases: preparation, critique, fantasy and implementation (Jungk & Müller 1987, 115-121). Only the preparation, critique and fantasy phases were part of the workshops. One could argue that the implementation phase was partly conducted as the participants also ideated new services to fit the futures images. However, the actual plans based on the foresight process will be made as a part of AE's strategy process.

The classical futures workshop needed to be modified in order to fit to the online environment. As mentioned in the previous section, the workshops were divided into *pre-workshop*, *workshop,* and *post-workshops phases*. The three actual online workshops took place after business day, each lasting for four hours, which was the absolute maximum a participant could attend to after work.

Pre-workshop phase included the preparation phase and a part of the critique phase, as the participants were already during the pre-assignment introduced to the tasking, research process, and intended end-products. Before the workshops, the researcher and the client agreed on the goals, tools, procedure and participant profiles for the workshops.

4.2.2 Participant selection

By Jungk and Müller (1987, 60-63), the heterogeneity and richness of backgrounds of the participant is pivotal for generating balanced views of the futures. In this study, the idea was not to collate a representative sample of AE's member associations or personnel, but to create heterogenous groups whose members' knowledge and skills would complement each other.

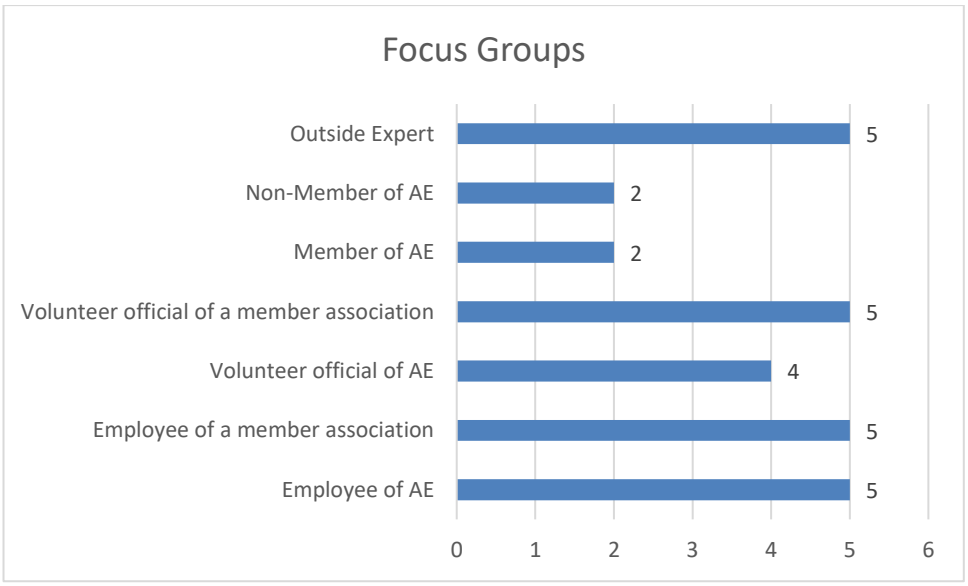

Figure 9 Participants by focus groups (n=28)

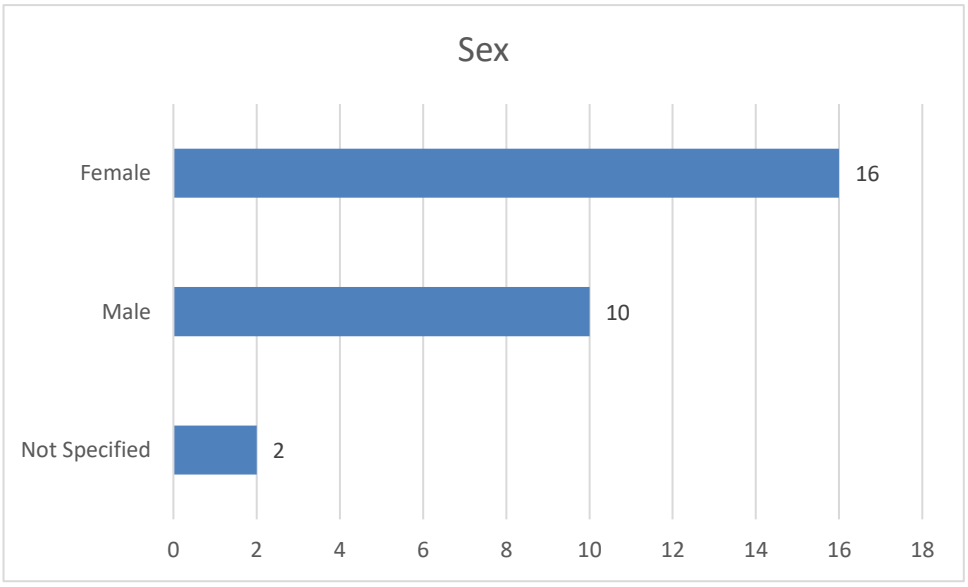

Figure 10 Participants by gender (n=28)

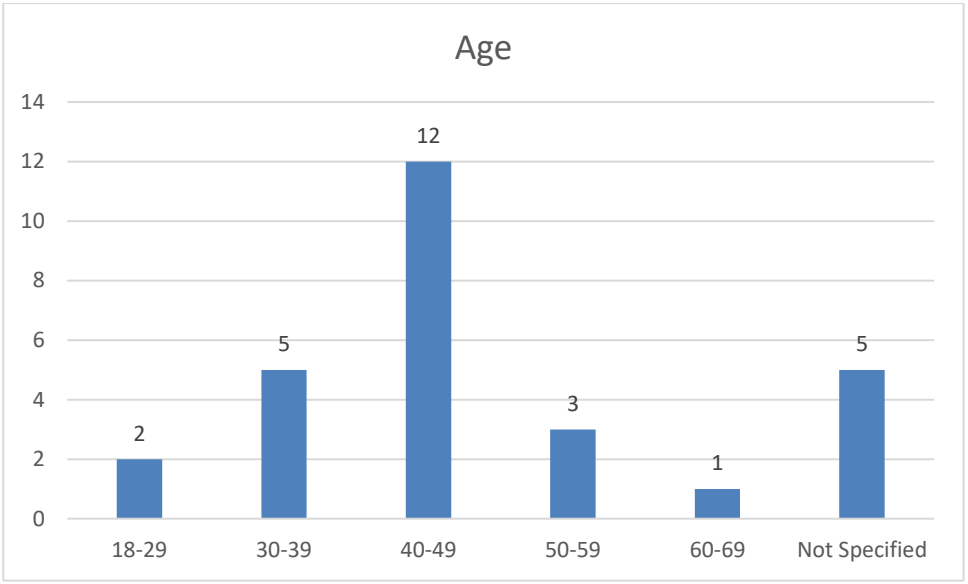

Figure 11 Participants by age groups (n=28 and average = 43)

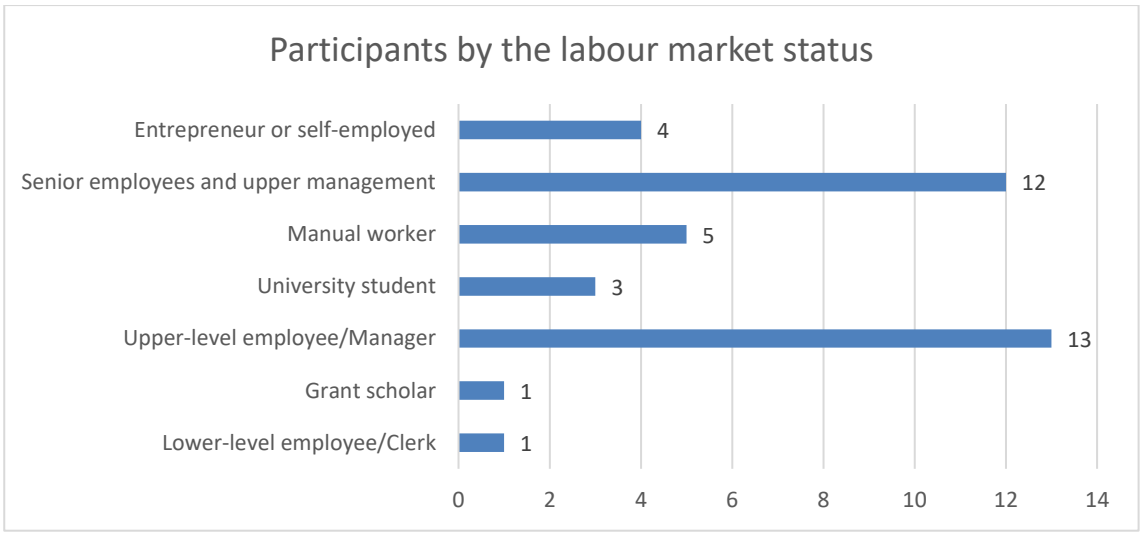

Figure 12 Participants by labour market status. A participant could have multiple overlapping statuses (n=28)

The client defined seven participant profiles for the workshops (figure 9):

1. employee of AE
2. employee of AE's member association
3. voluntary official of AE (member of the executive board or board's sub-committees)
4. voluntary official of AE's member association
5. regular member of AE's member associations
6. non-member (of AE's member association)
7. outside expert (employees of Akava or partner trade unions).

The majority of the participants were reached by advertising in AE's internal email-lists, but the non-members and outside experts were recruited directly by the client and the researcher. In the end, 30 participants were selected, of which five heterogenous groups were formed. Only two persons cancelled their participation to the workshops due to various reasons.

The participant group was heterogenous in terms of gender (figure 10), age (figure 11) and work status (figure 12). As Akava Special Branches represents people with an academic degree, almost all the participants had a university degree or were university students (appendix 1). As for professional status, people in leadership and executive position were over-represented as many of the employees of the member association, employees of AE and outside experts had an executive role in their respective organisations (figure 12). The other anomaly with the sample was the seemingly high average age of the participants - 43 years. Despite the efforts by the client and the researcher, only two persons below thirty enrolled on the workshops. Before taking part in the research, the participants were asked to fill in a consent form (appendix 4).

4.2.3 PESTEL-chart to familiarise with the subject and the tools

Microsoft Teams was used for communication during the workshops and MIRO as an online collaborative platform. The participants did a tutorial on MIRO already during the pre-workshop phase alongside the pre-assignment. The tutorial and the assignment were pre-requisites for participating in the main workshop as the participants needed to be familiar with the platform in order to ensure a smooth execution of the workshops.

After the tutorial, the participants were introduced to AE's mission, organisational environment, and member profile. The actual pre-assignment was to name the most important or most interesting driving forces or potential changes in AE's organisational environment by 2036. The scientific term "driving force" or "drivers for change" refer to the actual cause of an effect (Saritas & Smith 2011, 295). However, in the case of this research and pre-assignment, the driving force refers to any already visible trend, end-state of a continuum or a disruptive event that the participants regarded as interesting or important for AE in 2036.

Figure 13 An illustrating picture of how an individual participant was supposed to fill in the driving forces onto three levels on the PESTEL -chart

The participants were tasked to fill in driving forces to a modified PESTEL-chart to help them envision the futures from multiple angles. In this study, the PESTEL-chart was divided into three levels, and the participants were asked to place a maximum of three driving forces onto each level, preferably using different PESTEL-categories (figure 13). The levels were:

1. AE as part of the Finnish labour market system: the cooperation between the representatives of the state, the employee side and the employer side.
2. The organisational level of AE including its member associations: organisation culture, resources, infrastructure, services, interest lobbying, and public offices.
3. AE's member profile: work and private life.

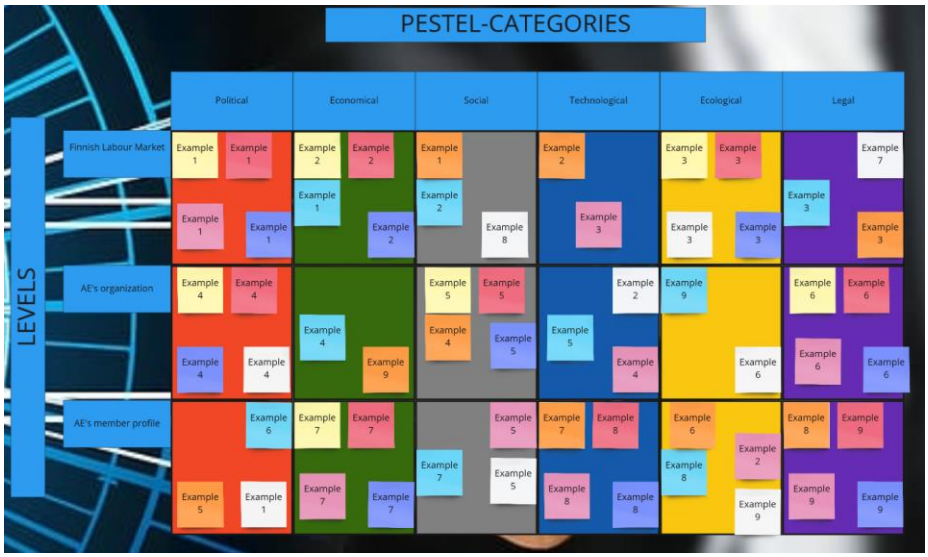

Figure 14 An illustrating picture on how the driving forces were collated in to a shared PESTEL for every group

Before the actual workshop started, the researcher gave each participant a colour code and collated the driving forces of each group to a single, shared PESTEL-chart (figure 14).

4.3 Workshop phase

Each actual online workshop lasted four hours. The workshops started with a short introduction to futures studies and foresight. It continued with workshop tasking, goals and rules and was followed by a futures window as a participatory exercise to break the social ice and to acclimatise the participants into futures thinking (critique phase in futures workshop of Jungk & Müller 1987). During the participatory co-creation (fantasy phase and partly implementation phase in futures workshop of Jungt & Muller 1987), the groupwork was divided into five steps:

1. Acclimation using a futures window
2. Combined PESTEL-chart for shared understanding
3. Deducting or fitting the driving forces into Dator's futures archetypes
4. Sketching the futures images concepts and new services
5. Presenting and commenting the concepts

4.3.1 Futures window for acclimation

The participatory phase of the workshop started with a futures window which consisted of inspirational images and music. The tasking followed a simple me-we-us-method. First, the participants were to look at the image, listen to the music and think of aspects in our current working life that will amaze, horrify, or raise nostalgia among the members of AE in 2050 (figure 15). In we-phase, people presented their views in groups of three. In us-phase, the subject was discussed as a group.

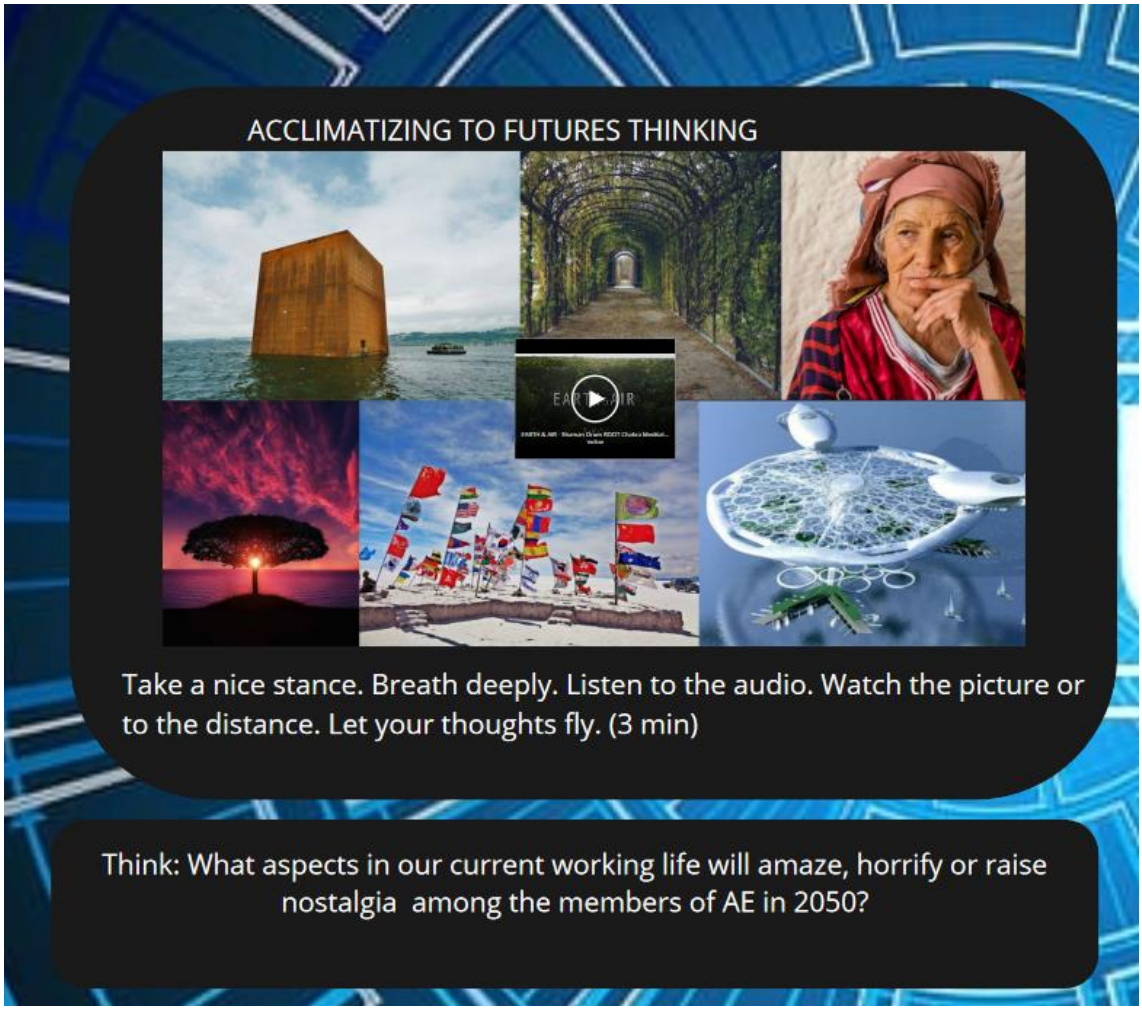

Figure 15 Futures window that was used for acclimatising the participants to future thinking and for breaking the social ice in the group

4.3.2 Combined PESTEL-chart for shared understanding

The researcher combined individual participants' driving forces into collective PESTEL-charts of every group (figure 16). To create a shared understanding of the potential changes in the organisational environment, each participant explained their chosen driving forces from the pre-assignment. During presentations and discussion, the participants were asked to cluster similar driving forces and to write down new ideas. In the end, they voted democratically for the most interesting or most important individual or clustered driving forces in each level (the Finnish labour market, AE's organisation and AE's members).

Figure 16 An illustrating picture on how a group has clustered the driving forces and voted on the most interesting ones with yellow star icons

4.3.3 Deducting the driving forces to Dator's futures archetypes

The next step was to deduct or fit the individual and collective driving forces onto a chart of four futures archetypes following the methodology created by Dator (2009). The driving forces could be perceived as becoming weaker or stronger, and they could be used in more than one futures archetype (figure 17).

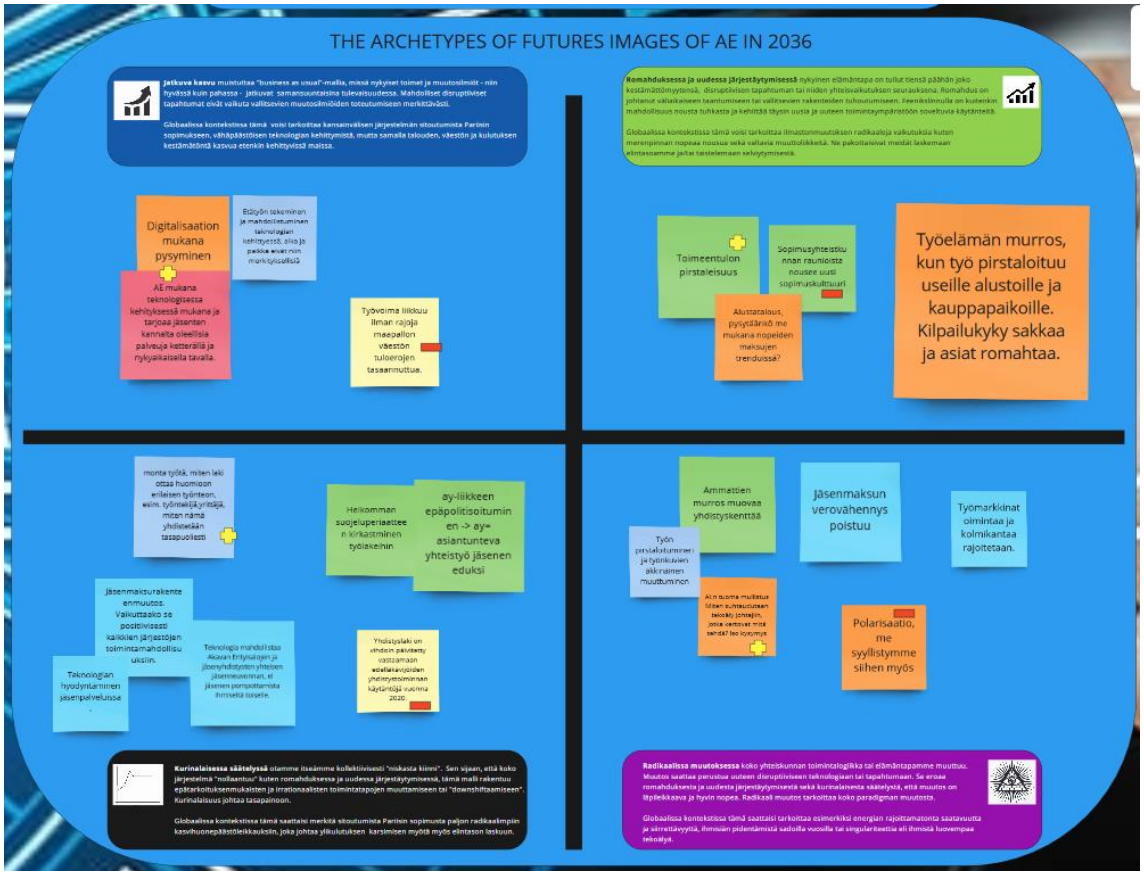

Figure 17 An illustrating picture of the driving forces deducted or fitted to Dator's chart of four archetypes of futures

In the context of this futures research process, the four different archetypes were described to the participants as the following:

The continuation resembles the idea of "business as usual". There will be no major changes nor disruptive events to affect the ongoing continuums. The decisions and action bring the intended results. In the contemporary context of climate change, this could mean that the international system would fulfil the Paris accords in limiting the CO2-emissions but that the global economy would still lean on over-consumption and limitless growth.

In *limits and discipline*, an entity (an individual, a community, or a system) rejects the old irrational and unsustainable habits. This could be a result of finally reaching the limits of growth or encountering a disruptive event. The end-result is a more sustainable way of life or an operational model. In the contemporary context of climate change, this could mean that the international system would commit to far more ambitious limits of CO2-emission or to lower standards of living in order to stop the over-consumption of natural resources.

In decline and collapse, an entity has hit the wall. It can be a result of a system collapse or a disruptive event. For a while, there might have been chaos and decline. In the end, the phoenix bird rises from the ashes and the entity reorganises itself. However, the new start might not be a positive one or bring prosperity for all. In the contemporary context of climate change, this could mean that the permafrost in Siberia would melt resulting in major natural disasters, even in the collapse of the international system. After a while, communities would start to reorganise themselves, adapting a new social, economic and ecological way of life.

In transformation, the whole paradigm or *modus operandi* of an entity has changed. It can be the result of a new technology or a disruptive event. However, it has changed the whole basis on which the earlier way of life or the earlier operating model was built on. In the contemporary context of climate change, an example could be mean that the abundance of clean energy would alter the entire global political, economic and ecological context. The problem of climate change would be completely erased.

The aim of futures studies is not to predict the future. The goal of the research process was to create alternative, possible futures of AE in 2036. Therefore, Dator's model of four archetypes was a very suitable tool for creating the images. The model gave a simple roadmap that helped the participants in creating different futures images in a very short period of time.

4.3.4 Sketching the futures image concepts

After the groups had deducted or fitted the driving forces to the chart, the participants were to ideate how the images would look like in terms of the same three layers as in the PESTEL-chart: the Finnish labour market system, AE's organisation, and AE's member's work and private life. In addition, they were to co-create ideas of new services that would fit in the created future (figure 18).

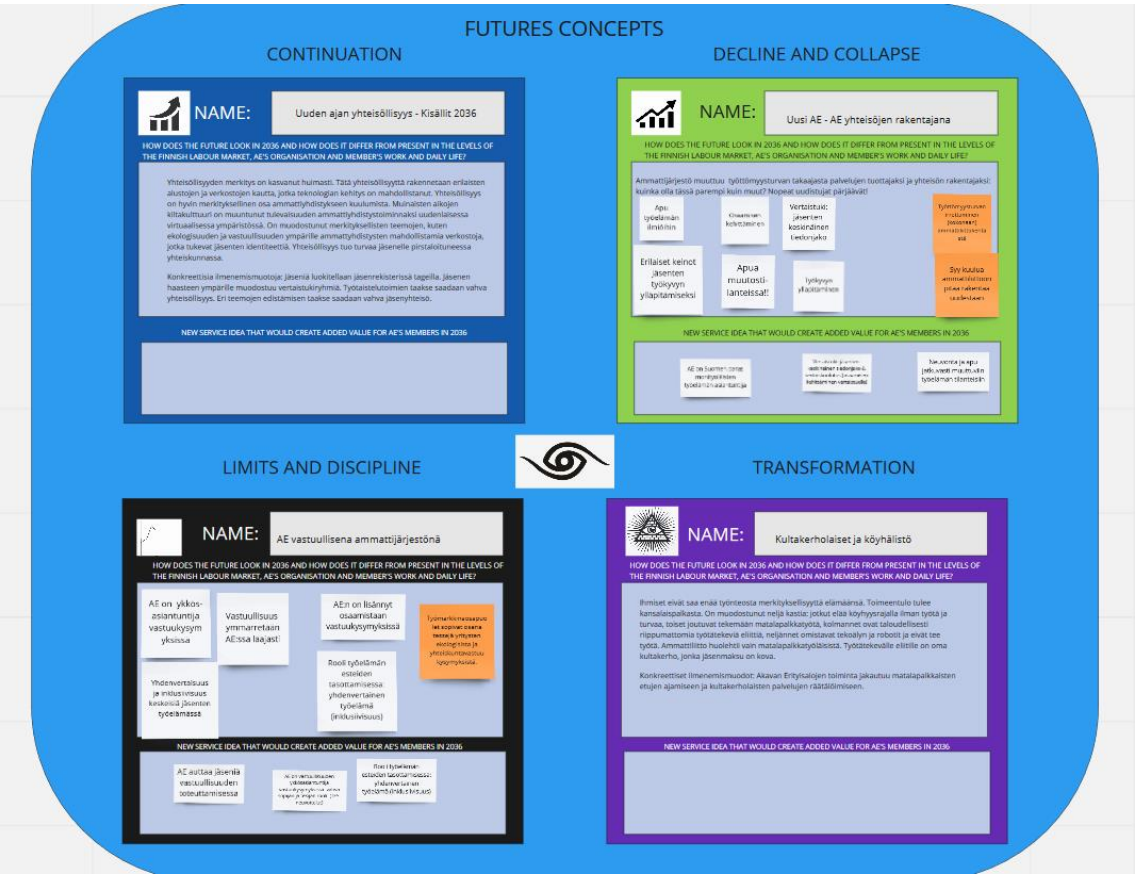

Figure 18 An illustrating picture on the futures image concepts based on Dator's four futures archetypes that were created by one group

The steps between the PESTEL-chart, Dator's chart of the archetypes and the concepts were not closed. On the contrary, the participants had the freedom to iterate between the phases and to use any previous material or new thoughts while creating the concepts and ideating the new services.

4.3.5 Presenting and commenting the concepts

In the end, the created futures narratives and the new service ideas were presented to the other participants and recorded by the researcher. After the presentations, there was an opportunity to discuss, to complement and to get feedback from the images. After the presentations, the workshops were closed with a feedback session, in which every participant had a chance to reflect on the work of the rest of the group.

4.4 Post-workshop phase

4.4.1 Commenting and complementing the futures image concepts

After the online workshops, the researcher wrote longer narratives about the twenty futures images and the seven new services based on group presentations and created material on MIRO. The researcher followed the storylines from the pitches and added elements to narratives from the material on MIRO only when necessary. To ensure validity, the participants had an opportunity to comment on and complement the initial versions of the futures narratives and the summarised new services.

4.4.2 Voting on the futures image concepts

The refined and validated futures images and service ideas were then collated, and two round survey was conducted on Google Forms. During the first voting round, the participants chose one futures image from each of Dator's four archetypes to be further developed (appendix 5). To enhance diversity, the participants were instructed to select only images created by other groups. The participants were also advised not to choose the most probable nor preferable images, but images that would differ from each other and would be the most interesting ones. In total, 26 workshop participants out of 28 voted in the first round.

4.4.3 Moodboards and storyboards to refine the futures images

The images that got the most votes in each archetype category (continuation, limits and discipline, decline and collapse and transformation) were further refined with classic service design communicative tools: moodboards and storyboards. In the context of the futures images, the moodboards were collages of pictures that were connected to the themes of the narratives (see section 5). In connection to the futures images, the storyboards were used to highlight how individual members would use AE's services in the future (see section 5). Even though the moodboards and storyboards are pivotal end-products of AE's assignment, they were produced solely by the researcher and were not analysed as part of the research process.

4.4.4 Evaluating the final futures images

The second voting round was a data survey on the probability and preferability of the four selected futures images, and the facility to execute and the preferability of the new service ideas (appendix 6). From each futures image, the researcher defined six futures statements. The statements were central theses to the images. The participants' task was to rate each statement on a scale of one (being highly improbable or highly unpreferable) to four (being highly probable or highly preferable). The participants also rated the seven new services using the same scale. However, instead of probability, the participants rated the service ideas in terms of facility to execute (one being very difficult and four being very easy). As with the voting, 26 out of the 28 workshop participants responded onto the second round of the survey.

In the end, the gathered data consisted of:

1. four futures images (consisting of a narrative, a moodboard, and a storyboard) as examples of each of Dator's four futures archetypes
2. six futures statements of each image (in total 24 statements in total) rated in terms of probability and preferability
3. seven new potential services rated in terms of facility to execute and preferability.

4.5 Data analysis methods

In general, explanatory research tries to form insights to a problem or new phenomenon and is often applied to qualitative data. Descriptive research aims at describing objects as they are and generally uses quantitative data for research purposes. (Patomäki 2015; Saunders & Lewis 2012, 140–141.) This thesis is predominantly explanatory but also has some descriptive features. It explains and examines the applied mixed-methods foresight process and its tools and end-results. Therefore, it is an explanatory case-study of the foresight process.

However, there is also data that is presented in a descriptive manner. The end-products of AE's assignment, the created futures images and the new service were evaluated on scale of one to four. The futures statements were evaluated in terms of preferability and probability. One meant that the statement was highly unpreferable or improbable and four that the statement was highly preferable or probable. The ideas for new services were evaluated in terms of facility to execute and preferability. One meant that the service was very hard to execute or highly unpreferable, whereas four meant that the service was very easy to execute or highly preferable. The numerical data was then entered into Microsoft Excel and illustrating figures and charts were created.

In total, 26 participants out of 28 voted on the futures images and evaluated the images and the service ideas in the post-workshop phase. The researcher verified that only the workshop participants had responded to questions. No defective responses were given. The evaluation of the probability and preferability of the futures images and the facility to execute and preferability of the service ideas was done using Google Forms.

The process, the used tools, and the end-products are further reflected on by the researcher in section six. Analysing the foresight process leans on explaining the different steps as precisely as possible. The transparency of the process also enhances the credibility of the research and the results.

5 EMPIRICAL ANALYSIS AND PRAGMATIC FINDINGS

5.1 The futures images and service ideas as end-products of the integrated foresight process

This section presents the four final futures images and the probability and preferability of each image. The section also examines the new ideas for services and how they were rated in terms of facility to execute and preferability. Therefore, the focus of this section is on the *pragmatic* tradition of Future Studies studying probable and preferred futures by concrete policy recommendations, action plans and strategies. (Malaska 2013, 19–20.)

The creation of these end-products followed the integrated foresight process by Gordon et al. (2019, 37–39) which is described in table 2. The empirical pathway to pragmatic end-results went through multiple phases and utilised multiple tools. However, it is important to point out how the data of pragmatic research tradition was collected.

In the *empathize and perceive* phase, each participant scanned and observed the driving forces using the three-layered PESTEL-chart. During *prospecting and defining*, the participants created a shared understanding using the combined PESTEL-chart, deducted the central driving forces to Dator's chart of futures archetypes and utilised concept chart to define how the futures would manifest themselves in macro- and micro-perspectives. As a part of *ideation* phase, the participants also created new services for the members in different futures. *Prototyping* was started by voting, which of the service ideas would be most promising and preferable to execute by AE. However, the concrete prototyping of the most promising services and the *probing and testing* phase of the integrated foresight process were left to AE's responsibility.

The futures images represent each of Dator's futures archetypes: continuation, decline and collapse, limits and discipline, and transformation. The storylines do not precisely follow the plots given by Dator that were presented in the previous section. However, this is irrelevant as the goal of Dator' concept (Dator 2009, 2–4) and AE's commission was to create alternative, possible futures, not to follow any pre-given storylines.

Polak (1973) argues that futures images should be alternative and comparable to each other to help the reader to vision multiple courses of action leading to varied outcomes. Following Polaks guidance, the three-layered structure and the pre-given storylines of Dator's archetypes enhances the comparability of the images. They include driving forces and phenomenon that are already exist today (for example the use of robots in customer

service) and elements that are still imaginary (for example the complete robotisation of the society). Especially Rubin (1998) has highlighted that it is important that the images include familiar elements of today but also present novel, even radical, ideas or technologies that challenge the current practises.

5.2 The digital labour union (continuation)

The world has become fully digital – labour unions included. Physical services are luxury products. Everything possible has been robotized. Artificial intelligence grants better understanding of the members' needs and the ecosystems they live in. Robots are a cost-effective way to build better services and to focus interest lobbying.

Akava Special Branches has merged into one digital national trade union federation. The new ethos of work and the fragmentation of careers have destroyed the basis of unions organised solely by the education or professions of their members. There is just the Digital Labour Union. Inside this huge trade union apparatus, every member creates an individual member segment and is served by an AI specifically designed to please their ear and style.

Members select a service profile that fits their current status in the work market. Everyone has a basic service level that can be upgraded limitlessly with higher membership costs. The law of supply and demand dictates what services are provided for the members (figures 19 and 20).

Figure 19 Storyboard of the futures image “The digital labour union”

Figure 20 Moodboard of the futures image “The digital labour union”

5.3 New AE – AE building communities (decline and collapse)

The pandemics of the 2020s accelerated the rise of platform economy and catalysed the changes in the way people work. This widened the division of the labour market between winners and losers. Escalation led to a recognition of the new black: careers are mosaics of overlapping statuses, and livelihood constitutes of many streams.

Reformations were made to start treating everyone equally in terms of work legislation and to grant everyone the same social welfare benefits regardless of whether people had permanent or fixed work contracts or whether they were entrepreneurs or platform workers. Earnings-based unemployment benefit was extended to all and separated from the unemployment fund membership.

Akava Special Branches serves the members with an extended networks of shop stewards. The stewards are not bound to a spesific employer or workplace. The stewards' network relies on peer support. A new steward is paired with a seasoned mentor to get support. The stewards serve the clients case-by-case, regardless of their works status (figures 21 and 22).

Figure 21 Storyboard of the futures image "New AE – AE building communities

Figure 22 Moodboard of the futures image "New AE – AE building communities"

5.4 AE as a sustainable labour union (limits and discipline)

Containing the climate change and safeguarding good life for future generations regardless of their home country required systemic cooperation and sacrifices. Thus, ecological issues and societal responsibility are being settled by the employers and the employees as a part of collective work contracts.

Akava Special Branches is the leading expert on matters of ecological, economic, social, and cultural sustainability. Inclusiveness and equality have a publicly recognised role as prerequisites for everyone to be able to work and to feel like being part of the society.

Responsibility is a part of AE's brand and a competitive advantage. AE promotes sustainability on the labour market and in society. It offers its members coaching to act more sustainably and responsibly at their work and in their private lives (figures 23 and 24).

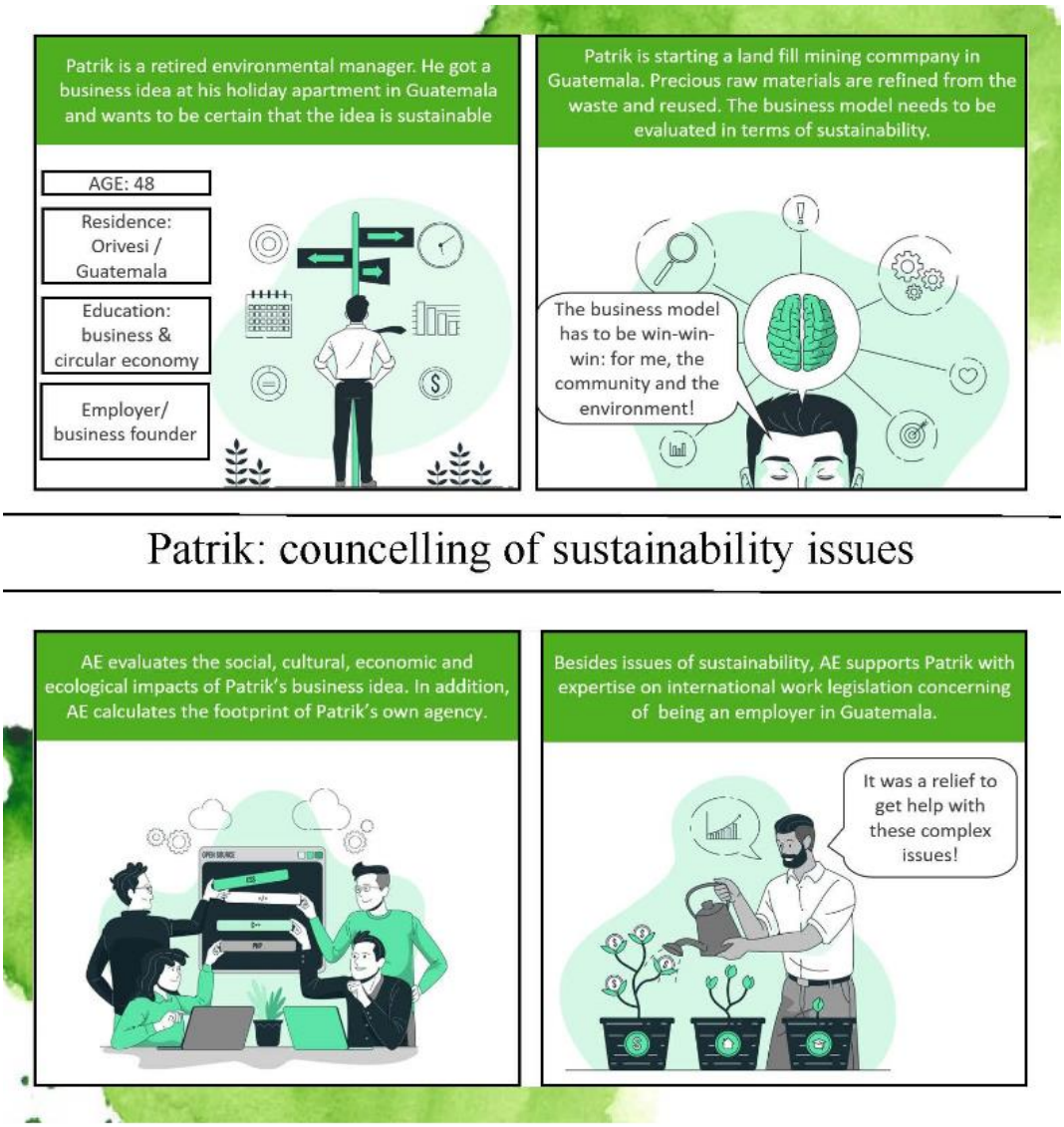

Figure 23 Storyboard of the futures image "AE as a sustainable labour union"

Figure 24 Moodboard of the futures image "AE as a sustainable labour union"

5.5 Services for Jacks of all trades (transformation)

The world has entered a reality of artificial intelligence. Robots and algorithms have taken over manual routine tasks such as the transportation industry and replaced routine cognitive professions like medical doctors and lawyers. Instead, interaction between humans cannot be replaced by machines. Typical professions of Akava Special Branches' members, such as teaching and coaching, leadership and tasks requiring creativity flourish.

Increased productivity has led to a universal basic income. People are empowered to work in meaningful jobs and the work is more project based. One can work from the pier of a summer cabin or from a retreat in Goa. Living in the countryside is popular again. Economic freedom enables sliding between works statuses, from being a part-time pensioner to becoming a student or, from being on part-time parental leave to working full-time again.

The AI of Akava Special Branches helps the members find harmony between their work and private lives. The AI helps them navigate between different roles and updates expertise, offers life-coaching, prepares work or commission contracts, helps the transition to retirement or to reschooling, and mentors the members in becoming entrepreneurs (figures 25 and 26).

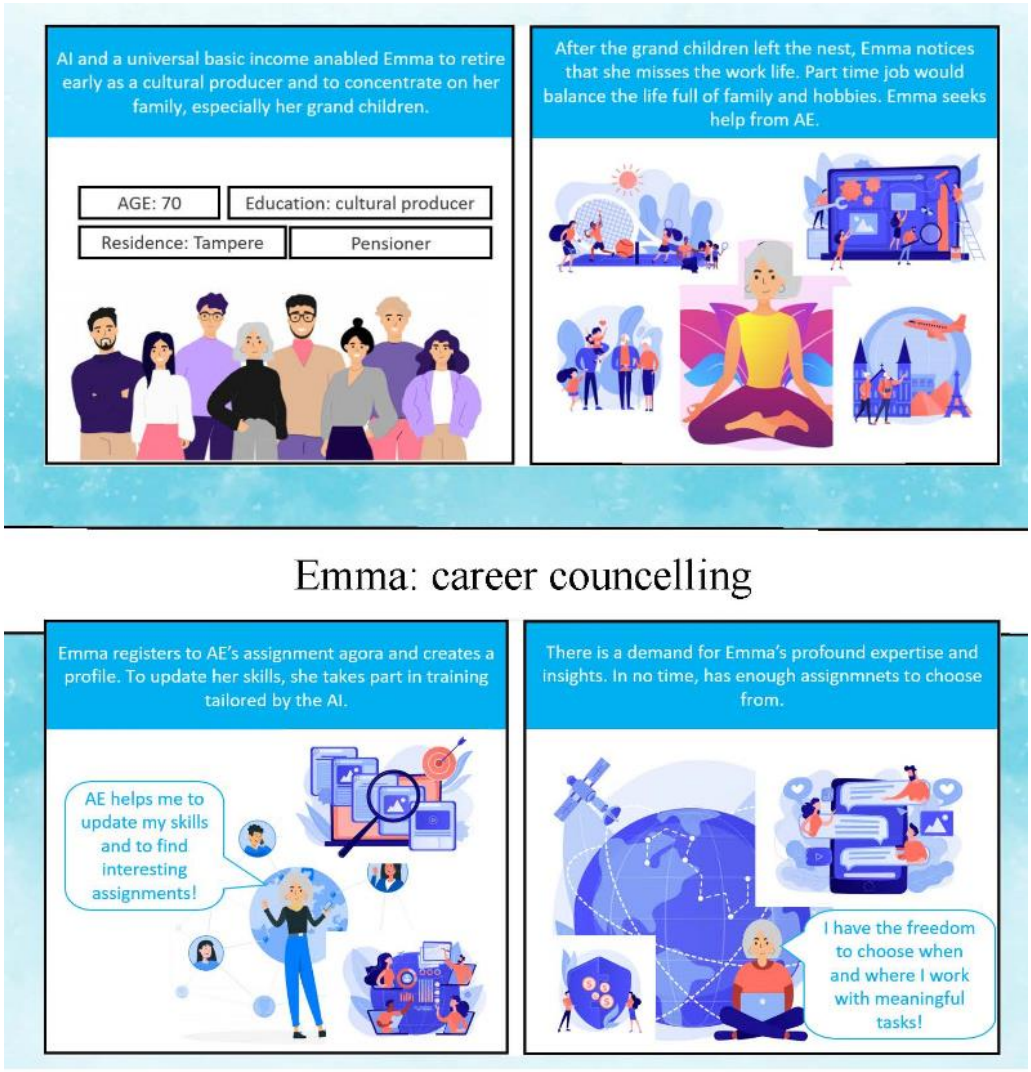

Figure 25 Storyboard of the futures image "Services for Jacks of all trades"

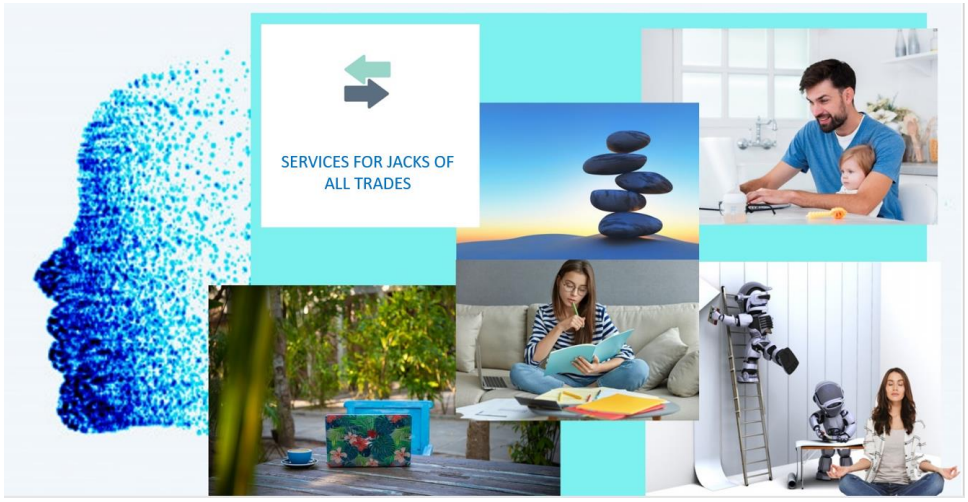

Figure 26 Moodboard of the futures image "Services for Jacks of all trades"

5.6 Evaluation of the futures images

In total, 26 workshop participants out of 28 evaluated the final four futures images and the seven service ideas. Each image had six futures statements that were rated in terms of probability and preferability in 2036.

Combining the average probability and preferability ratings of the images' futures statements (figures 27 and 28), the most preferable futures image was "AE as a sustainable labour union" (3.52/4 in preferability) and the least preferable one was "New AE – AE building communities" (2.46/4 in preferability). However, there was only a small difference to the second least preferable one, "The digital labour union" (2.5/4 in preferability). The most probable one was "Services for Jacks of all trades" (3.08/4 in probability) and the most improbable one was "The digital labour union" (2.74/4 in probability).

Gordon et al. argued (2019, 30) that the aim of foresight is to create alternative futures that are not only predictable nor probable extrapolations of current changes (see section 4). However, the created futures images were evaluated to be more probable than improbable. The participants seemed to vote for futures images that were probable and preferable by nature.

One could argue that the selected futures fulfill the purpose of both Jungk's and Dator's foresight processes. Jungk specifically developed the futures workshop to empower people and communities to vision the preferred futures and help them to construct a strategy to reach them (Jungk & Müller 1987, 6–26). Dator argues that his archetypes should foster the understanding of the preferred futures and lead to creating collective plans to reach them (Dator 2009, 1-5). Apart from one, they were also rated as either more preferable or very close to the average rather than highly unpreferable. Even "New AE – AE building communities" ranked almost to average.

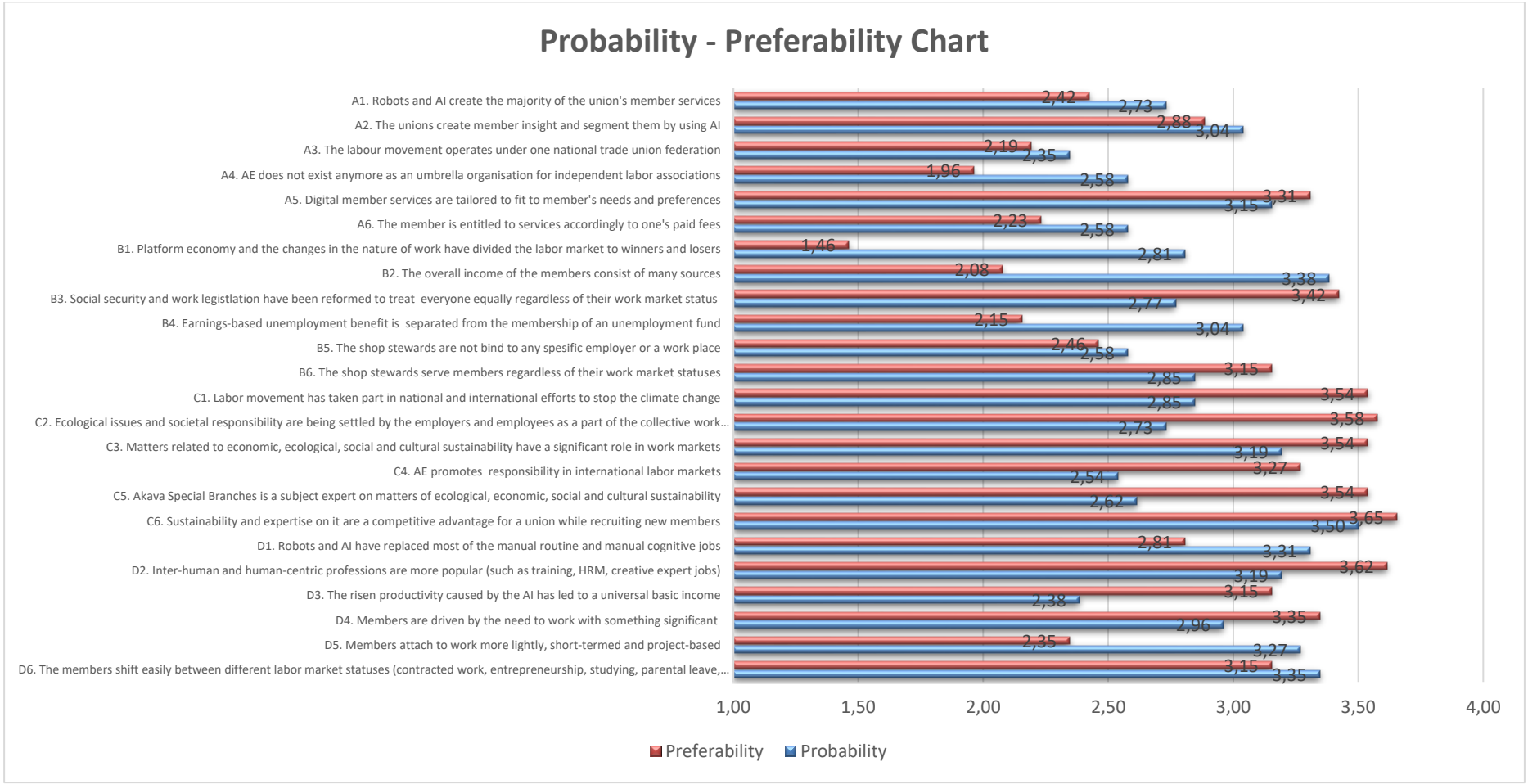

Figure 27 Futures statements based on the futures images rated in terms of probability and preferability. One being highly unpreferable/improbable and four being highly preferable/probable. Futures statements: prefix A = “The digital labour union”, prefix B = “New AE – AE building communities”, prefix C = “AE as a sustainable labour union” and prefix C = “Services for Jacks of all trades”

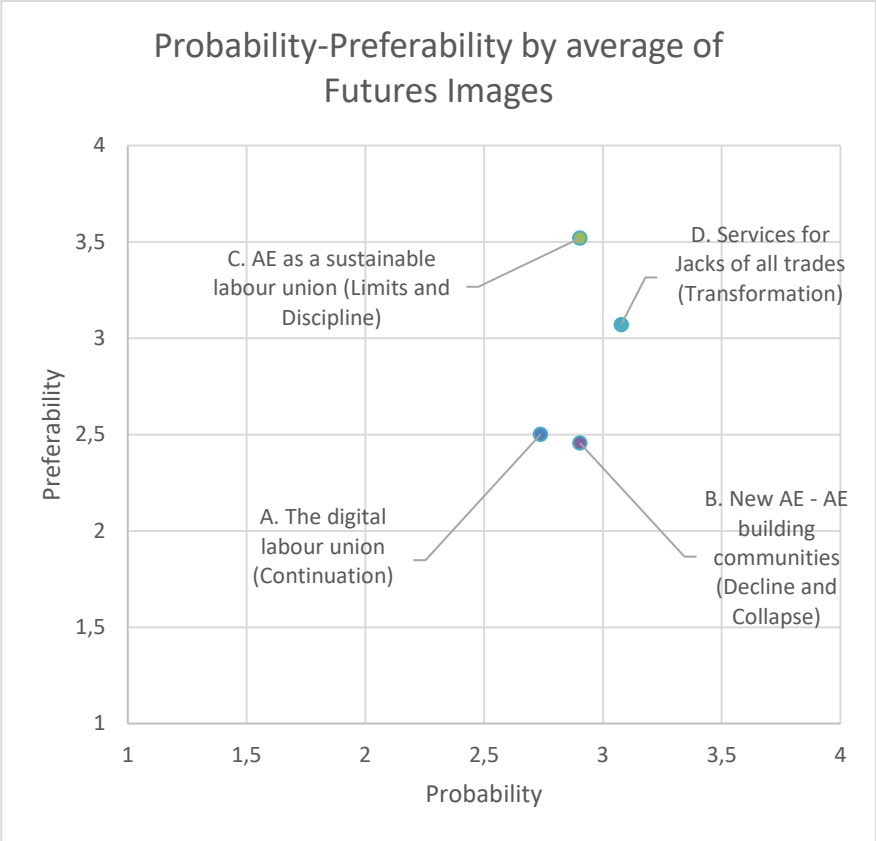

Figure 28 The futures images in a probability-preferability chart based on the average rating of each image's futures statements. 1 being highly unpreferable/improbable and 4 being highly preferable/probable

5.7 Evaluation of the service ideas

Even though the actual *prototyping* or the *testing and probing* phases of the integrated foresight process are not included to this study, the evaluation of the service ideas does give insights on what could be the most promising ideas to execute (Gordon et al. 2019, 37–39).

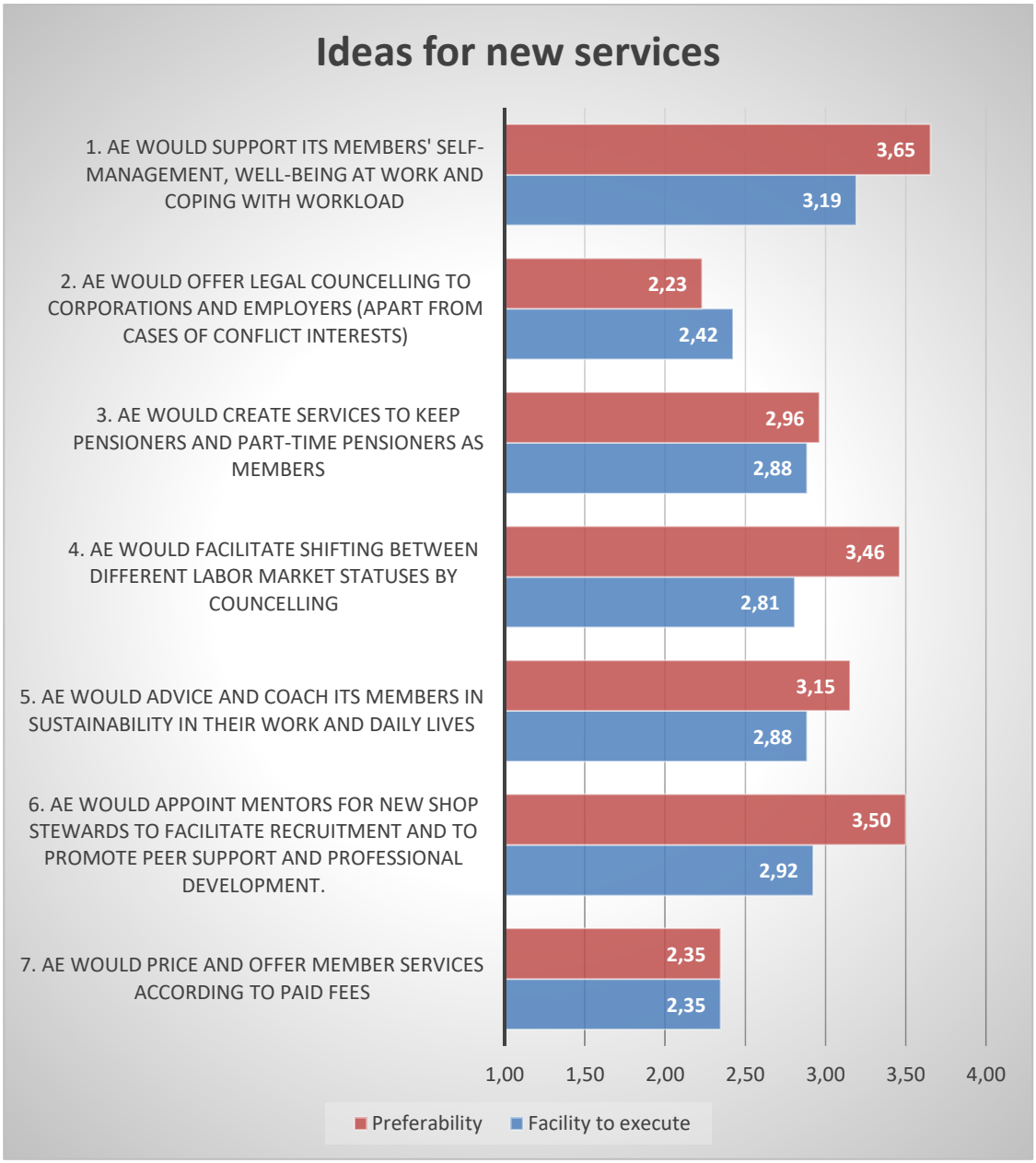

Figure 29 Ideas for new services in accordance with facility to execute and preferability. 1 being highly unpreferable/highly difficult to execute and 4 being highly preferable/highly easy to execute

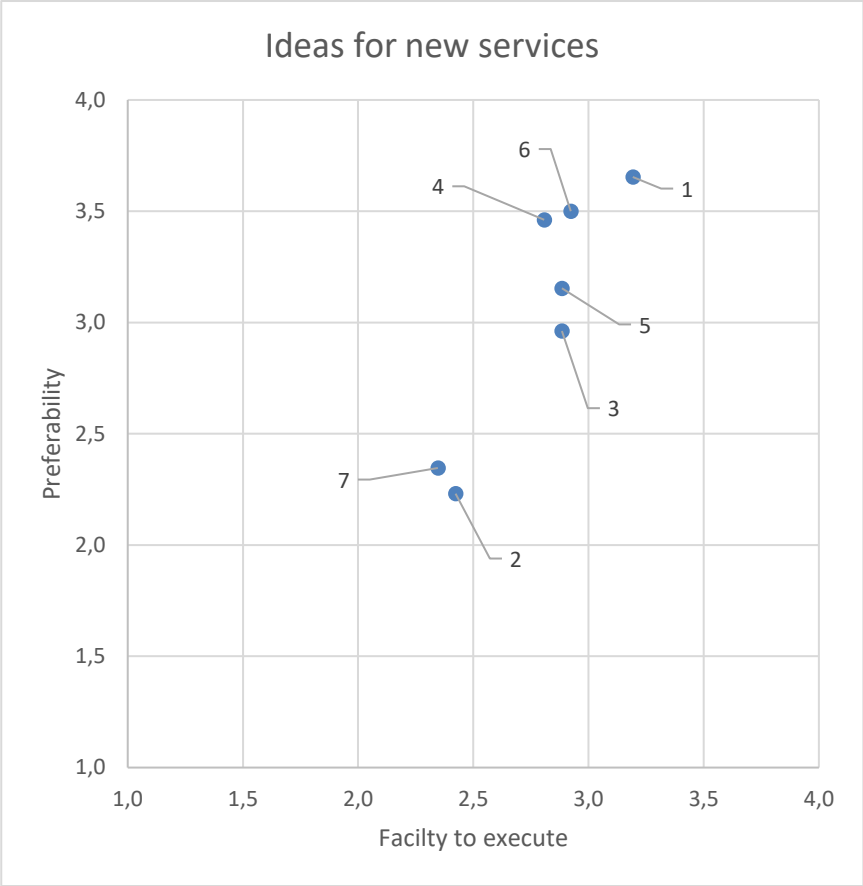

Figure 30 Ideas in terms of facility to execute and preferability. The concrete ideas can be found in the previous figure

The seven new service ideas were evaluated in terms of facility to execute and preferability (figures 29 and 30). Five of the ideas were regarded as both easy to execute and preferable. Two of the ideas were rated to be difficult to execute and unpreferable: number 2, “AE would offer legal counselling to corporations and employers [apart from cases of interest conflicts]” and number 7, “AE would price and offer member services according to paid fees” . The most highly rated idea in terms of facility to execute (3.65/4) and preferability (3.19/4) was number 1, “AE would support its members’ self-management, well-being at work and coping with workload”.

However, apart from numbers 2 and 7, also the rest of the ideas were considered easy to facilitate and preferable, namely number 3, “AE would create services to keep pensioners and part-time pensioners as members”, number 4, “AE would facilitate shifting between different labour market statuses by counselling”, number 5, “AE would advise and coach its members in sustainability in their work and daily lives”, and number 6, “AE would appoint mentors for new shop stewards to facilitate recruitment and to promote peer support and professional development”.

Gordon et al. (2019, 30) have stressed that the alternative futures created in foresight should widen our understanding of the window of opportunity today. The enhanced understanding of the operational environment and end-user needs should give stimulus for developing new and existing strategies, products, and services. Even though the created futures images were more probable than surprising, the service ideas connected to them were rated high in terms of facility to execute and preferability. This advocates that the mixed-methods used as a part of the integrated foresight process brought intended results.

6 DISCUSSION AND SYNTACTICAL FINDINGS

6.1 Reflecting the mixed-methods online foresight process

This thesis was a part of an assignment to create futures images and ideate new potential services for Akava Special Branches in 2036. The research question was to examine, how the mixed-methods foresight process conducted online serve the creation of the images and services. Therefore, the research question and the focus of this section is on the *syntactical* approach to Future Studies. By Malaska (2013, 19–20), syntactical tradition studies and develops tools, processes and concepts used in foresight processes.

The research took place in 2021 as the world was going through the COVID-19 pandemic. Therefore, the process had to be conducted online using electronic applications such as Microsoft Teams for communication, MIRO for collaborative platform and Google Forms for polling. The integrated foresight process loosely followed the steps of a classic futures workshop and combined other futures research tools such as PESTEL-charts, futures windows, Dator's futures archetypes, and surveys, to service design tools such as moodboards and storyboards.

6.2 Online environment promotes accessibility but require focus

The setup to organise the foresight process online was not ideal. Futures Studies is a collaborative discipline. Especially in co-creative futures workshops, empathic dialogue is a prerequisite for a shared understanding and balanced end-products (Dator 2009, 1–5; Lauttamäki 2016).

Participating in a workshop online without being physically present in the same space limits communication and understanding. It is also easy to get distracted or to perform multitasking behind one's computer screen. However, multitasking is extremely harmful during creative collaborative processes (Buser & Peter 2012, 650–652).

Already Jungk declared that a successful futures workshop requires commitment of the participants (Jungk & Müller 1987, 5–11). During the process, the researcher had to emphasise very clearly that a successful workshop and an interesting experience would require the participants to give their full attention to their fellow members when co-creating. The workshops were challenging for the participants. Getting used to new electronic applications is burdensome and using electronic tools intensively for a long period is tiresome. Four hours of attendance was the absolute maximum that could be required from a volunteer participant after a workday. Organising the workshops during

business hours would have limited the number of participants and made it difficult to recruit people with jobs. This could have ended with an unrepresentative sample of participants.

To lighten the process, the workshops were divided into pre-workshop, actual workshop and post-workshop phases. Only the actual workshops were organised real-time. Participating online required the participants to train and work with new technological tools. During the pre-workshop phase, the compulsory pre-assignment on MIRO offered an opportunity to gently encourage the participants to familiarise themselves with the application already beforehand. Also, the use of Microsoft Teams with breakout rooms required the participants to install the latest update of the desktop application.

In addition to technical requirements, online workshops also promote accessibility, emphasized already by Jungk (Jungk & Müller 1987). The workshops that were organised after business days were an easy way to participate to AE's futures process regardless of the participants place of residence. This ease of participation also helped to attract participants evenly from different focus groups. In fact, two people participated in the workshops from abroad. In total, 28 participants out of 30 enrolled participants completed the pre-assignment and joined the online workshops. In addition to increased accessibility, the good turnout was result of intensive communication with the participant weeks before the actual workshops.

Facilitating online-workshops is intense and has restrictions. The tasking and the instructions must be straightforward, especially if there is more than one group to facilitate. When conducting a workshop face-to-face in a shared space, the organiser is more omnipresent than when the workshop is arranged online. With breakout rooms, one can only hear and see the reality of one room. Constant hopping between the rooms will only create disturbance. To avoid confusion and to make sure that the groups keep oriented, the researcher nominated assistant facilitators from each group. Before the workshop, the researcher briefed them about the upcoming tasking and the time limits. However, the assistants were also reminded not to steer the group but to remain as technical facilitators.

6.3 Enabling comparability and safeguarding the micro perspective

To help the participants to create balanced futures images and to enable their comparability (pointed out already by Polak 1973), the same organisational division was used throughout the workshop tasking. The participants were to create the futures images reflecting the same three levels throughout the PESTEL-charts and the canvas for futures images concepts:

1. AE as a part of the Finnish labour market system: the cooperation between the representatives of the state, the employee side and the employer side

2. The organisational level of AE including its member associations: organisation culture, resources, infrastructure, services, interest lobbying and public offices
3. AE's member profile: work and private life

Gordon et al. (2019, 37–39) have pointed out that in order to create balanced views of the futures and customer or end-user centric services, one must maintain understanding of both the micro and the macro perspectives (see step *prospect and define* in table 2). It is vital to perceive the changes in the internal and external ecosystem of the organisations. However, the organisations consist of their members and they serve their respective customers or end-users. Therefore, it is pivotal that the futures or futures services are also visioned from the end-user or micro perspective.

The purpose of the assignment was to create futures images and ideate new services for Akava Special Branches. The ecosystem of AE constitutes of its internal and external organisational environment, members included. As a trade union, AE serves its specific member profile and operates in the Finnish work market. It was central that the futures images would specifically focus on AE that serves its members in the respective Finnish work market. The tasking to ideate new potential services was to underline the mission of AE to create added value for its members.

In addition to the division described in the tasking, the researcher often reminded the participants to vision the futures especially from the member-perspective. Despite of these actions, the participants tended to concentrate more on the labour market and AE's organisation. This was a surprise as four participants were regular members or non-members of AE's member associations and nine participants represented volunteer officials of AE or its member organisations. To conclude, 13 out of 28 participants did not work for the labour movement. However, it is possible that, regardless of them sharing the member profile of AE, the volunteer officials examined the futures from organisational perspective of AE rather than from the perspective of their daily work.

The actual end-products of the workshops were the concepts canvas and the recordings of the pitches the groups held. The researcher compiled the futures narratives and the service ideas from the material. These end-products are very typical to futures workshops (Jungk & Müller 1987, 69–72; Bell 2009, 304; Lauttamäki 2016). The narratives of the future images are rather short. This was due to a fact that the workshops only lasted for four hours. The participants did not have time to ideate longer and more complex images. While writing and complementing the narratives, the researcher wanted to lean on the original pitches of the groups as much as possible and added left-over material from earlier workshop stages only when necessary. In the end, all the written narratives were subjected to comments and approval from the participants.

In addition to the three level-approach, the participants were also tasked to ideate any new services that would bring added value to AE's members while creating the images. In the end, seven new ideas emerged. Interestingly, four of these ideas were connected to the futures images that the participants voted as the final images out of the 20 images that were divided into Dator's futures archetype categories (continuation, decline and collapse, limits and discipline and transformation). It is possible, that the groups that thought about the futures also from an individual's or member's perspective, also created more balanced images. Therefore, those images could have performed better in the voting stage.

6.4 Dator's chart of futures archetypes as a mixing-pot

As described in section three, PESTEL-chart is used to categorise subjects from political, economic, social, technological, environmental, and legislative perspectives (Gordon et al. 2019; Yüksel 2021). The chart was modified and divided into three levels to help the participants to reflect the AE's organisational environment from macro and micro levels. During the pre-assignment, the participants filled the PESTEL-chart individually with driving forces connected to AE's ecosystem. To create a shared understanding of the driving forces, the individual charts were combined during the actual workshop. Each group also evaluated the significance of the individual or clustered driving forces. These driving forces were then extrapolated to Dator's futures archetypes by deduction (Dator 2009). Every individual or clustered driving force could also be evaluated to either become weaker or stronger in the future, and the driving forces could be used in more than one archetype.

First, the groups were instructed to discuss what made Dator's archetypes – continuation, limits and discipline, decline and collapse, and transformation – different. Then they were asked to think about which of the individual or clustered driving forces from the group's PESTEL-chart could create the centre pieces of the futures image.

As the groups fitted the driving forces from the PESTEL-chart to Dator's chart of futures archetypes, they lost the division of the three levels. The intention was to encourage the groups to not think about the driving forces in terms of levels but to combe them in a creative way by applying divergent thinking. Predominantly, the groups selected different driving forces for each of the archetype. For example, they did not choose climate change as the main variable and create all the archetypes through its different outcomes.

While filling in the futures concept canvases, the groups were to return to the three-level structure: the Finnish labour market, AE's organisation, and member's work and private lives. The groups were to use convergent thinking while concepting the futures images canvases. Again, they were to

describe each of the ideated futures archetype using the same three level division mentioned above. The groups were also constantly reminded that they are creating the futures images of Akava Special Branches that serves its members and operates in the Finnish labour market. As mentioned previously, the images that mostly described the macro level changes in the world or in the Finnish work market and neglected the member-perspective were not voted as the final futures images of the different archetype categories.

6.5 Voting and evaluation in order to bring validity in post-workshop phase

The end-products of the actual workshop phase were the pitches about the futures archetypes and the new potential services. In the post-workshop phase, the researcher and the participants interacted to create, to validate and to evaluate the images and the new services. However, the researcher was merely a facilitator and did not contribute to the actual cocreation of the images (see Mattelmäki & Sleeswijk 2011, 2). In addition, all the material from the different steps were documented on the MIRO-platform. After the workshop, the researcher wrote narratives of each futures image following the pitches as precisely as possible. Next, the researcher gave the participants an opportunity to comment and complement them. Then they voted one futures image from each futures archetype category to be further refined and evaluated in terms of probability and preferability.

The voting brough elements similar to Delphi method to the process. In Delphi, the researcher and, the often expert, participants are in multi-round interaction with each other. The tasking takes place in multiple layers and enables the researcher to define the tasking based on the answers of the previous rounds. The goals of the method are to exploit the expertise of the participants as profoundly as possible and to bring validity to the conclusion based on the data of the earlier rounds. The difference between Delphi and the mixed-methods foresight process was that during the voting and evaluating rounds the participants did not have the possibility to exchange views on the subject. (Lilja et. al. 2011; Rowe &Wright 2011.)

The final four images were examples of Dator's four archetypes. This left 16 futures images (four from each archetype category) that were not evaluated by the participants. This was not ideal. However, the participation took place on voluntary basis and the researcher could not expect too much work from the participants. Participatory foresight processes always balance between scientific ambition and the justified expectations of participant input. During the process, the participants had to learn to use a new application and perform a pre-assignment as well as take part in a four-hour long workshop, read through the material and vote on the 20 futures images, and eventually rate 24 future statements and seven ideas for new services. Furthermore, as interesting as the final futures images

and new services are, the main focus of this research is the appliance of the mixed-methods foresight process conducted online.

6.6 Combining futures narratives with moodboards and storyboards

The integrated foresight process combines elements from foresight and Service Design (Gordon et al. 2019). The interplay between Futures Studies and Service Design is also seen in the end-products. The assignment from AE was to co-create futures images and to ideate new services for Akava Special Branches in 2036. The end-products of the mixed-methods foresight process were the four futures images and seven potential services.

The images constituted of a classic futures narrative of Futures Studies and a moodboard and a storyboard, communicative tools typical to Service Design (Tomitsch et al. 2018, 92–93, 279). To underline the member perspective, the researcher created a storyboard to each image that describes how an individual member and AE as the service provider interact. Each futures image also has a unique visual design and contains a moodboard to help the spectator immerse in the mood of the image (section 5).

Although the futures narratives did not follow the storylines of Dator's futures archetypes, they did differ from the present and from each other. All narratives reflected the future from a micro and macro level reminded by Gordon et al. (2019, 37–39) and Dator (2009, 2-5).

6.7 Validity, reliability and limitations of this study

External and internal validity dictate the quality of the research process and the applicability of its results. Internal validity is based on the question of whether the selected methods produce intended results. External validity refers to the applicability of the research results in another context. (Thietart 2001, 196.)

The internal validity of this research leans on describing the process, used tools and applied methodology as transparently as possible. Therefore, the reader is able to evaluate the foresight process, the applied tools and the researcher's reflection on them.

This thesis is a study of a mixed-methods foresight process conducted online. It is also a case study on how the methodology was applied to create futures images and ideate new services for Akava Special Branches in 2036. In terms of external validity, the reflection of the usability of the methods could be generalised to other organisational environments as well. In fact, variations of the

mixed-methods approach have already been utilised by the researcher at Laurea University of Applied Sciences. The futures images consisted of three levels: the Finnish labour market, AE's organisation, and AE's members. Especially the visioned changes in the macro-level could be interesting in terms on any generic labour union. However, also changes in the members' micro-level are mostly applicable to life of an average citizen in Finland.

The reliability of the research refers to whether the same results could be achieved if the process was repeated by another person (Thiehart 2001, 210). Focusing on the futures images and service ideas created during the workshops, one could hardly assume that any group would create identical end-products. Even more, the appliance of the mixed-methods foresight process, the observations and conclusion made by the researcher are very subjective. Another person would make different remarks and notions. This is very common in case-studies. However, the reliability of the research results can be put into test by applying the mixed-methods approach or parts of it in a similar or a different environment and then taking the different setting into account.

As a result of the accessibility of the online environment and the active interaction between the researcher and the participants, 28 participants out of the 30 recruited study subjects completed the compulsory pre-assignment and participated in the workshops. 26 of them also voted on and evaluated the futures images and service ideas. The participants formed a representative sample of different focus groups defined by the client. However, the average age of the participant was relatively high (43 years), many of them worked in executive and managerial positions and most of them (22 persons) were either employees or volunteer officials in the labour movement. It would be interesting to study how differently a sample of younger non-experts saw the futures of Akava Special Branches.

Another variable is the role of the facilitator in collaborative work. On one hand, the workshops need structure and facilitating. On the other, the facilitator should not influence the actual work or take part in the creation of the end-products. For example, during the workshops, the researcher did remind the participants to include the member perspective in the images. However, this was done in order to ensure that the groups created balanced futures narratives.

While evaluating the futures images, the participants rated six futures statements of each image. The statements had been created by the researcher to summarise the key contents of the images. However, the futures images were not scalable, even by their contents. Some concentrated more on the micro level (The digital labour union) and some on the macro level (AE as a sustainable labour union). Therefore, the futures statements were not scalable and represent the researcher's view on what is central in the images.

The futures statements and narratives, storyboards and ideas for new services were originally written in Finnish. They were translated to English by the researcher as a part of this thesis. As the

researcher is not a native English speaker nor a professional translator, some of the meanings may have been lost in translation. The original Finnish versions of the end-products have been attached to this study as appendices to enable the comparison (appendix 2).

The researcher did not collect feedback of the futures workshops from the participants. The evaluation and reflection of the mixed-methods foresight process was done solely based on the researcher's own observations. A feedback survey or interviews could have brought an additional layer and insightful data to the research. However, even the current process with its pre-assignment, actual workshop, and follow-up surveys was burdensome to volunteer participants.

7 CONCLUSION

This thesis has examined how the mixed-methods foresight process conducted online served the creation of futures images and new services for Akava Special Branches in 2036. It has contributed to Futures Studies by reflecting how Gordon et al's (2019) integrated foresight process combining Futures Studies and Service Design has served the creation of futures images and how a modified futures workshop has been conducted online. The study has followed the *syntactical* research tradition as it has reflected the methodology and tools used in the process. On the other hand, it has also presented the end-products of AE's foresight process binding the thesis to *pragmatic* research tradition. (Malaska 2013, 19–21.)

In total, 28 participants took part in three online workshops, that were divided into pre-workshop, workshop and post-workshop phases. In this mixed-methods approach, futures workshop (Jungk & Müller 1987) constructed the framework for the collaborative process (chapter 4). During the co-creation, futures window (Heinonen & Hiltunen 2012), PESTEL-chart (Gordon et al. 2019), futures archetypes (Dator 2009) and surveys (Vehkalahti 2018) were used to create the end-products: the four futures images (Polak 1973; Rubin & Linturi 2001) refined with moodboards and storyboards (Tomitsch et al. 2018; Stickdorn et al. 2019, 239) and seven service ideas for AE in 2036. The client was also presented with statistical data of the evaluation of the images and services, as well as the material from the earlier stages of the foresight process (chapter 5).

The electronic and methodological tools worked well in an online environment. In fact, creating presentations combining audio-visual content with smart and practical canvases for group work and documenting the different steps of the foresight process was extremely easy. MIRO as the collaborative platform and Microsoft Teams as the audio-visual communication application enabled smooth co-creation. However, the participants were required to learn to use MIRO before the actual workshop. They were also expected to have basic skills in using Microsoft Teams. Still, the current communication technology does not yet substitute co-creating face-to-face. It also poses challenges when just one person is to facilitate multiple groups at the same time.

The division of the futures workshops into pre-workshop, actual workshop and post-phases conducted separately enabled to execute more sophisticated and demanding tasking. The division was also pivotal in supporting the participants in maintaining their focus. The approach also made it possible for the researcher to collate and process the inputs and create segmental tasking based on the earlier work done by the participants.

In all foresight process theories, there is a phase in which the signals or observations from the past and the present are analysed, reframed, or put into context. In 3Ps model, it is called the *sense-making* phase (Rohrbeck & Kum 2018, 6–7). In AFP's integrated foresight model, the stage is called *prospecting and defining* (Gordon et al. 2019, 37–39). In this research process, the classic PESTEL-chart proved its value as a tool to make sense and to create coherence to individual participants' observations of the driving forces.

PESTEL-charts in the pre-assignments and as the starting point for creating a shared understanding during the workshop phase, encouraged the participants to think about the futures from multiple perspectives. PESTEL also brought more variables to Dator's chart of futures archetypes. Reflecting on the driving forces of each archetype through the three levels - the Finnish labour market, AE's organisation, and AE's members - produced balanced futures narratives. The task to ideate new potential services emphasised the member's or customer's perspective. The moodboards and storyboards created by the researcher amplified the message of the narratives. To select and tailor the communicative tools to fit to the target audience is an essential aspect in any Service Design process (Stickdorn et al. 2018). This is a practice that should be applied more in Futures Studies and foresight processes.

The mixed-methods foresight process was an applied version of the classic futures workshops. It followed the ideals of Jungk by promoting inclusiveness and equality (Jungk & Müller 1987, 6–22). The mixed-methods process enabled a heterogenous stakeholder participation and gave voice to the members and voluntary officials instead of only engaging with the top-level employees of the union and its affiliates. The three-layered tasking forced the groups to consider the futures also from a member perspective.

The developed mixed-methods foresight process could easily be applied to any generic organisation. As an online method, it promotes accessibility, enhances interaction and validation of results, is relatively light and quick to apply and produces balanced, communicative futures images. The labour movement is struggling with maintaining legitimacy and is seen as an exclusive institution especially by the younger generations. Perhaps additional inclusive foresight processes similar to this could foster the discussion of the futures of labour movement and bring new agency to the unions.

Reflecting on the topic of this research, it seems that humanities are very much alive in the age of algorithms. Even in the most digitalised futures image, "the digital labour union", artificial intelligence and robots are not masters, but merely tools to create more individual services. In "services for Jacks of all trades" the technological development and the increased productivity have liberated people to live and work in a more meaningful way. Following that story line, humanities central to Akava

Special Branches are not replaceable by algorithms in the future - instead, humanities are a competitive advantage and the key for a better life.

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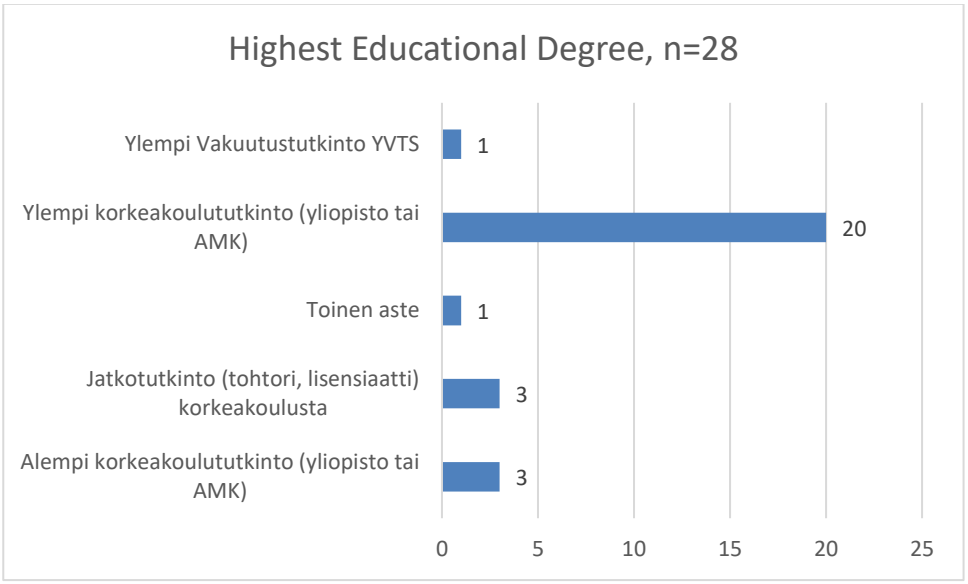
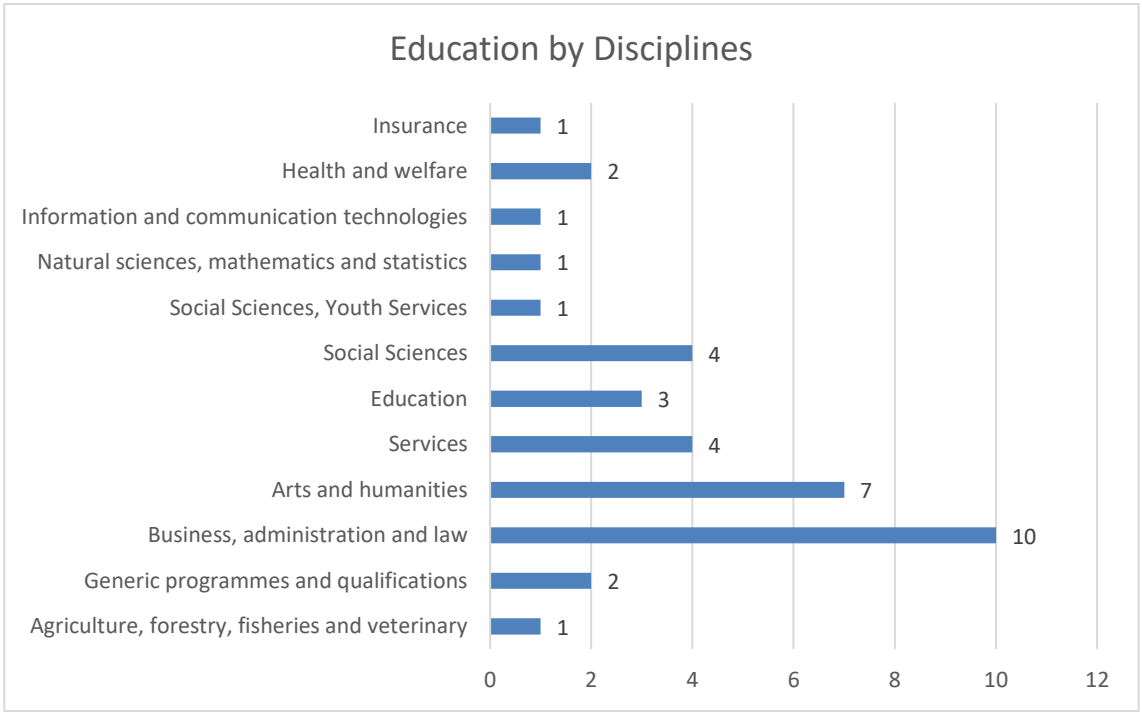
APPENDICES

Appendix 1. Additional tables of the participants



Participants by the highest educational degree (n=28)



Participants by educational disciplines. The participant may choose multiple disciplines according to his or her educational history (n=28)

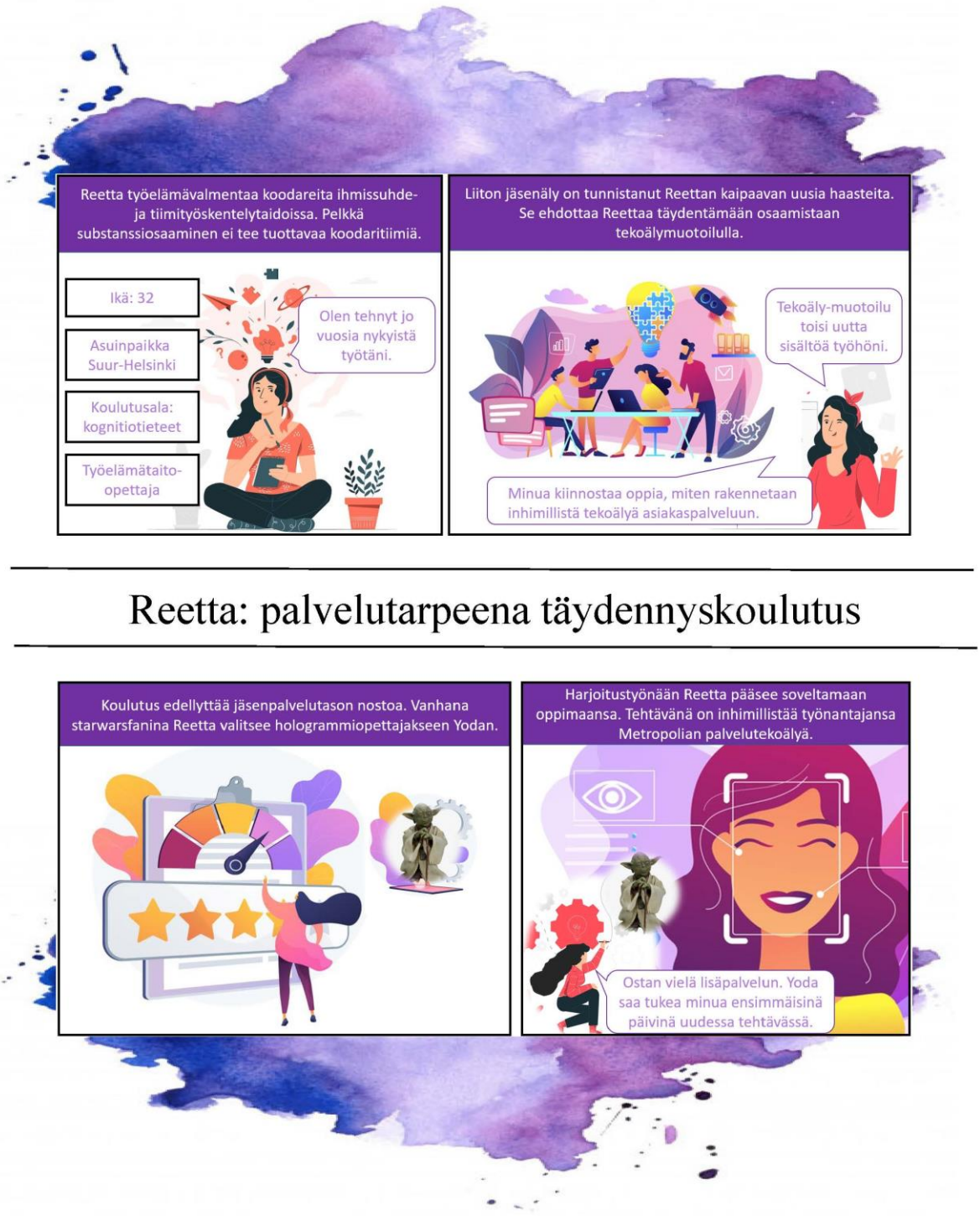
Appendix 2. Futures images in Finnish

Maailma on digitalisoitunut - ammattiliitot sen mukana. Fyysiset jäsenpalvelut ovat ylellisyystuotteita. Kaikki mahdollinen on robotisoitu. Tekoälyllä vahvistetaan jäsentuntemusta ja robottien tuomilla lisäresursseilla kyetään rakentamaan parempia palveluita ja henkilökohtaisempaa edunvalvontaa.

Akavan Erityisalat on sulautunut osaksi yhtä digitaalista ammattijärjestöä. Työelämän murroksen ja työurien pirstaloitumisen seurauksena koulutus- tai ammattialan perusteella järjestäytyneet liitot ovat menneisyyttä. On vain yksi digitaalinen liitto.

Tämän suuren ammattiliittokoneen sisällä jokainen yksilö muodostaa oman "jäsensegmenttinsä", jota tekoäly palvelee juuri jäsenen kielelle, korvalle ja tyylille muotoiltuna.

Jäsen rakentaa oman palveluprofiilinsa sopimaan kulloiseenkin työmarkkinatilanteeseensa. Jokaisella jäsenellä on peruspalvelutaso, jota voi räätälöidä ja korottaa rajattomasti suuremmalla jäsenmaksulla. Kysynnän ja tarjonnan laki määrittelee, millaisia palveluita jäsenille tarjotaan.

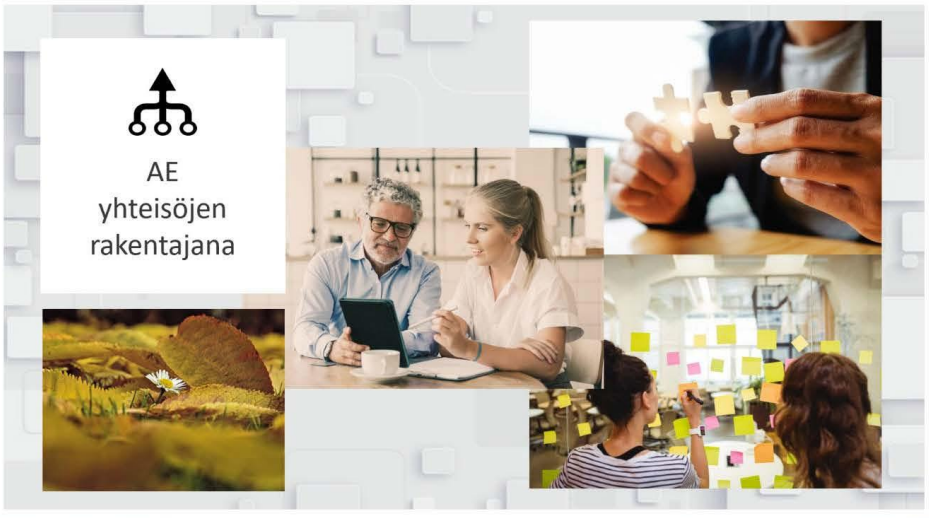


Futures image “The digital labour union” in Finnish.

Uusi AE - AE yhteisöjen rakentajana

20-luvun alun pandemiat kiihdyttivät alustataloutta ja työn murrosta johtaen työmarkkinoiden jakautumiseen voittajiin ja häviäjiin. Eskaloituminen huipentui lopulta uuden normaalin tunnustamiseen: työura koostuu monista osin päällekkäisistä statuksista ja toimeentulo on pirstaleista. Ryhdyttiin mittaviin uudistuksiin, joiden seurauksena virkasuhteisten, työsuhteessa olevien, yrittäjien tai silpputyöläisten välillä ei enää tehdä eroa sosiaaliturvan tai työlainsäädännön nimissä. Ansiosidonnainen työttömyysturva on irrotettu työttömyyskassojen jäsenyydestä.

Akavan Erityisalat palvelee jäseniään laajennetun luottamusmiesverkoston kautta, jossa luottamusmiehet eivät ole sidottuja tiettyyn työnantajaan tai työpaikkaan. AE:n luottamusmiesverkosto perustuu vertaistukeen. Aloittava luottamusmies paritetaan kokeneemman mentorin kanssa tuen takaamiseksi. Luottamusmiehet palvelevat case-mallisesti työntekijöitä työsuhdestatuksesta riippumatta.



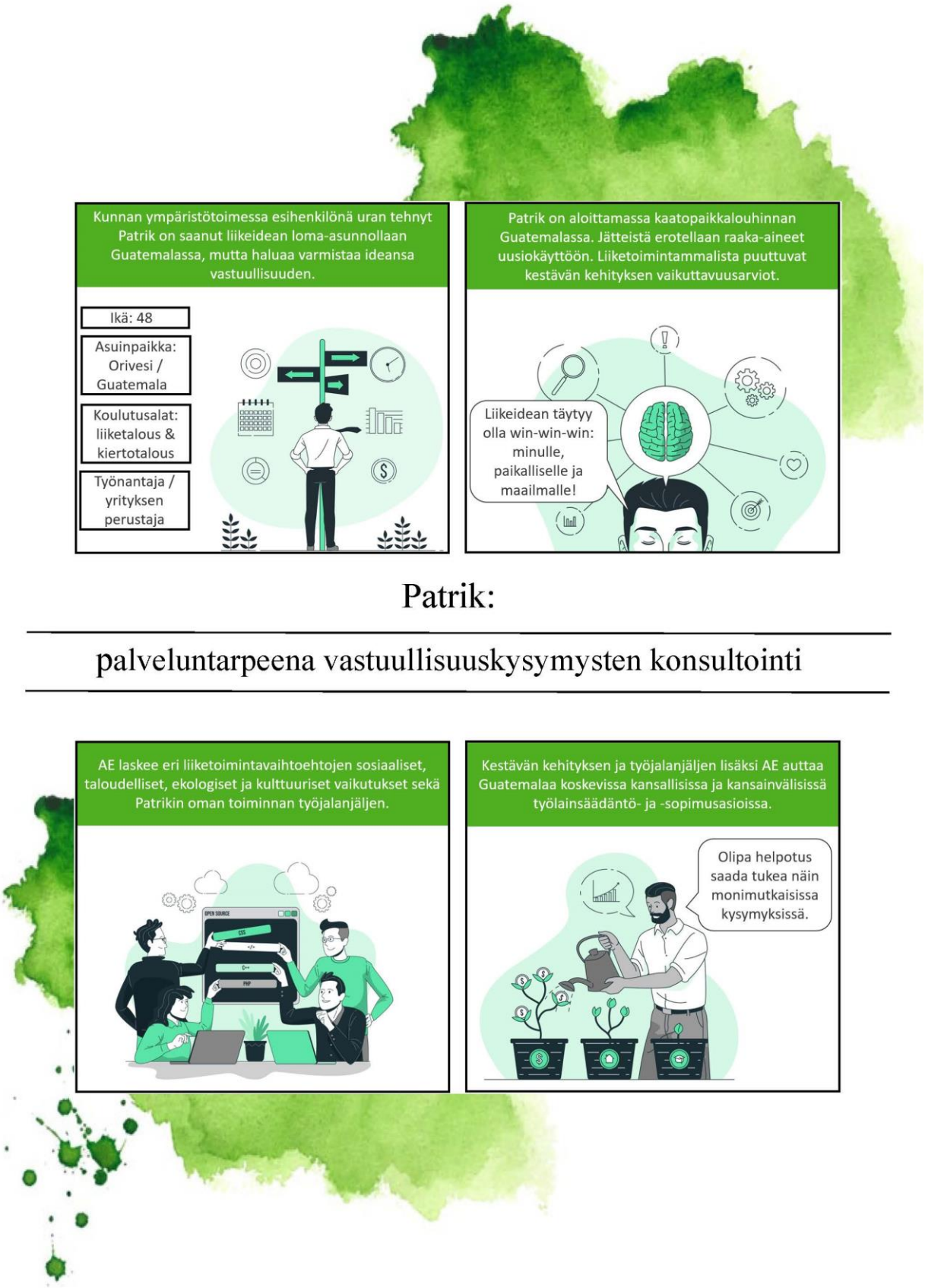
Futures image “New AE – AE building communities” in Finnish.

AE vastuullisena ammattijärjestönä

Ilmastonmuutoksen hillitseminen ja hyvän elämän edellytysten varmistaminen jälkipolville, riippumatta synnyinmaasta, ovat edellyttäneet systeemistä yhteistyötä ja panosta. Täten myös työmarkkinaosapuolet sopivat yritysten ekologisista ja yhteiskuntavastuukysymyksistä osana työehtosopimuksia.

Akavan Erityisaloista on rakennettu ekologisten, taloudellisten, sosiaalisten ja kulttuurillisten vastuullisuusasioiden ykkösasiantuntija. Vastuullisuuskysymyksillä, kuten inklusiivisuudella ja yhdenvertaisuudella, on tunnustettu olevan keskeinen rooli jäsenkunnan työelämän esteiden tasoittamisessa ja kiinnittymisessä yhteiskuntaan.

Vastuullisuus on osa Akavan Erityisalojen brändiä ja kilpailuetu. Akavan Erityisalat tekee vaikuttamistyötä vastuullisuuden edistämiseksi työmarkkinoilla ja siten yhteiskunnassa. Samalla se tarjoaa jäsenkunnalleen coachingpalveluita auttamaan heitä toimimaan kestävämmin ja vastuullisemmin sekä työelämässä että omassa arjessa.



Futures image “AE as a sustainable labour union” in Finnish.

Monityöläisen palvelut

Maailma on siirtynyt kerta heitolla tekoälyn ulottuvuuteen. Robotit ja algoritmit ovat korvanneet työt manuaalisista rutiinitöistä kuten ajoneuvon kuljettamisesta aina rutiininomaisiin kognitiivisiin töihin kuten lääkäri- ja lakimiespalveluihin. Sen sijaan ihmistenvälisyyttä ei ole voitu korvata koneilla. Akavan Erityisaloille tyypilliset työtehtävät; koulutus, johtaminen ja luovuutta vaativat ammatit kukoistavat.

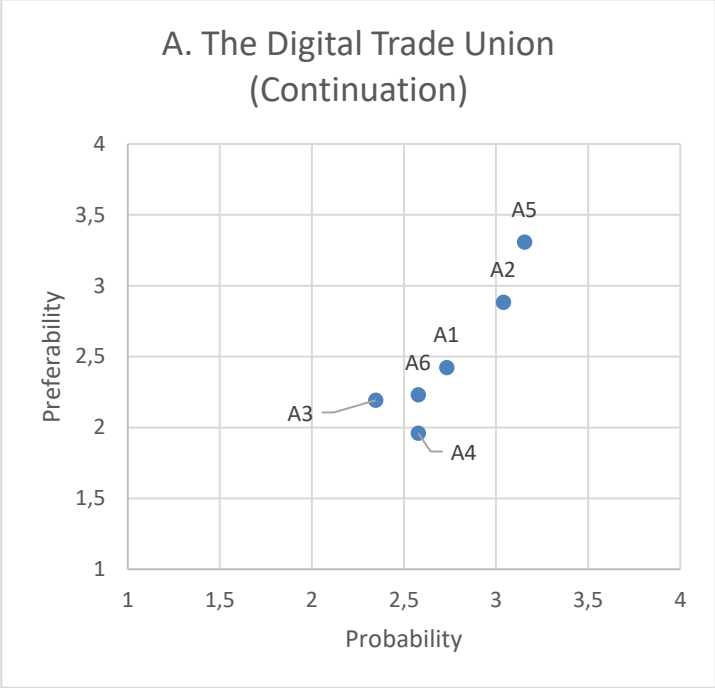
Lisääntynyt tuottavuus on johtanut kaikille kansalaisille taattuun perustoimentuloon ja ihmisten vapautumiseen tekemään töitä merkityksellisyydentunteen ajamina ja projektiluonteisemmin. Työtä voi tehdä laiturinnokasta tai Goalta, maaseutu vetää taas. Toimeentulon vapaus mahdollistaa myös liukumisen eri työmarkkinaroolien välillä vaikkapa osa-aikaeläkeläisyydestä opiskeluun tai puolivanhempainvapaalta täystyölliseksi.

Akavan Erityisalojen tekoäly auttaa jäseniä löytämään harmonian työn ja muun elämän välillä. Se palvelee jäseniä liikkumaan erilaisten statusten välillä etsien täydennyskoulutusta, antaen life-coachausta, valmistellen työ- tai toimeksiantosopimuksia, pedaten siirtymistä eläkkeeltä osa-aikatöihin tai selvittämällä yrittäjäjäsenen työnantajavelvollisuuksia.

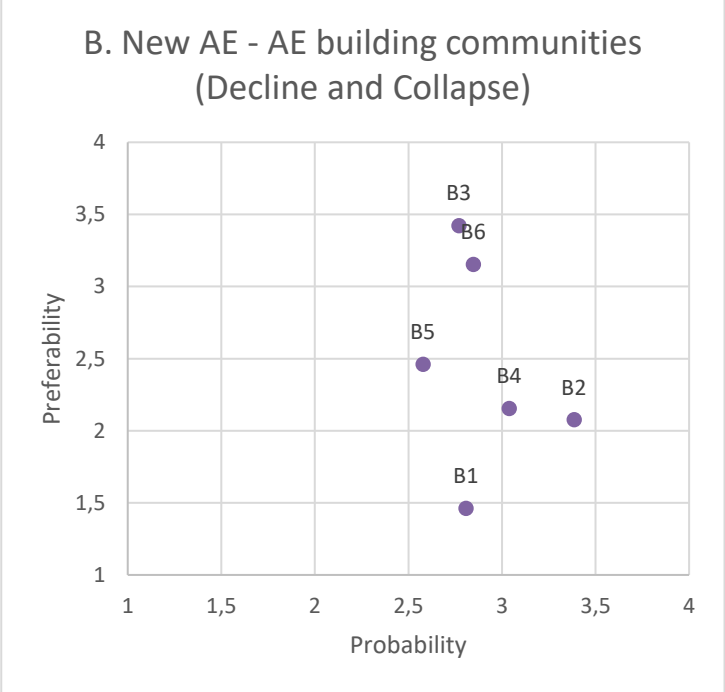
Emma: palvelutarpeena uraohjaus

Futures image “Services for Jack of all trades” in Finnish.

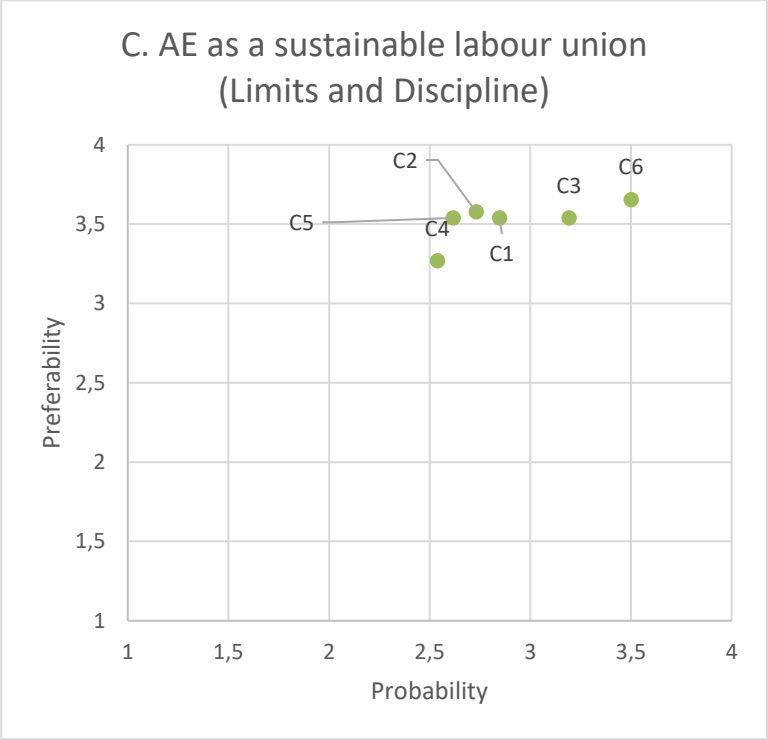
Appendix 3. Additional tables of the probability and preferability of the futures statements



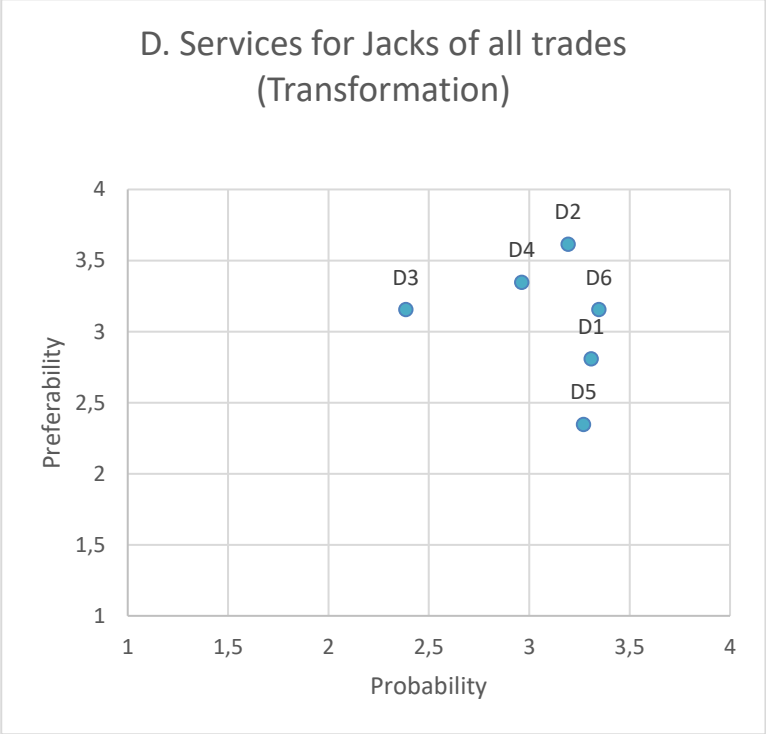
The probability-preferability chart of the futures statements of the futures image "The digital labour union".



The probability-preferability chart of the futures statements of the futures image "New AE – AE building communities".



The probability-preferability chart of the futures statements of the futures image "AE as a sustainable labour union".



The probability-preferability chart of the futures statements of the futures image "Services for Jacks of all trades".

Appendix 4. Consent form

Suostumuslomake Akavan Erityisalat 2036 tulevaisuusprosessiin

Osallistuaksesi tähän tutkimus- ja kehittämisprosessiin allekirjoita tämä suostumuslomake. Sillä luovutat sinusta tutkimuksessa kerätyn datan ja tuotoksesi tämän tutkimusprojektin käyttöön.

Alla on lista ehdoista, jotka pyydämme sinua lukemaan läpi. Mikäli suostut kaikkiin näihin ehtoihin, allekirjoitathan tämän lomakkeen.

- Osallistumisesi tähän tutkimus- ja kehittämisprosessiin on vapaaehtoista.
- Voit kysyä tutkimuksen suorittajilta kysymyksiä osallistumisestasi koska tahansa (Pasi Hario, pasi.hario@laurea.fi, 0406309106).
- Voit vetäytyä tutkimus- ja kehittämisprosessista milloin tahansa.
- Kaikki kerätyt henkilökohtaiset tiedot tehdään tunnistamattomiksi niin, ettei tunnistetietoja ja mielipiteitä ole mahdollista yhdistää.
- Tietojasi suojellaan hankkeen aikana ja ne tuhotaan tutkimus- ja kehittämisprosessin päätteeksi.

- tutkimus- ja kehittämisprosessiin pohjalta luodaan tulevaisuuskuvia Akavan Erityisaloista vuonna 2036, joita on tarkoitus hyödyntää myös liiton toiminnan kehittämisessä.
- Tutkimus- ja kehittämisprosessiin toteuttaja ja Akavan Erityisalat pyytävät lisäksi lupaa käyttää osallistujan tunnistustietoja, kuten nimeä ja sosiaalisen median nimimerkkejä viestintä- ja markkinointitarkoituksessa sosiaalisessa mediassa. Huomaathan, että tähän pyydetään alla erikseen suostumusta.

Osoita suostumuksesi tai kieltäytymisesi valitsemalla jompikumpi alla olevista vaihtoehdoista:

-------- Annan luvan tunnistetietojeni, kuten nimeni ja sosiaalisen median tunnistetietojen käyttöön viestintä- ja markkinoimistarkoituksessa.

-------- En anna lupaa tunnistetietojeni, kuten nimeni ja sosiaalisen median tunnisteitteni käyttöön viestintä- ja markkinoimistarkoituksessa.

……

Osallistujan nimi ja sukunimi

……

Paikka, aika ja osallistujan allekirjoitus

Täytä ja allekirjoita tämä lomake ja lähetä se osoitteeseen pasi.hario@laurea.fi

Appendix 5. The form of the first voting round

Appendix 6. The form of the second voting round

Tulevaisuuskuvien ja uusien konseptien todennäköisyyden ja toivottavuuden arvioiminen

Akavan Erityisalat 2036 -tulevaisuuskuvat ovat jo melkein maalissa! Nyt käynnistyy tutkimuksen viimeinen vaihe eli teidän valitsemienne tulevaisuuskuvien ja uusien konseptien arvioiminen! Ilmoitathan kyselyn lopussa yhteystietosi, niin Akavan Erityisalat lähettää sinulle kiitoksen panoksestasi liiton tulevaisuuksien hahmottelemisessa!

Sinulle esitetään 24 jatkoon valittuihin tulevaisuuskuviin perustuvaa lyhyttä väittämää Akavan Erityisalojen toimintaympäristöstä vuonna 2036.

Väittämiin vastataan neliportaisella asteikolla kahdesta eri näkökulmasta:

1) niiden toteutumisen todennäköisyydestä vuoteen 2036 mennessä ja
2) niiden toteutumisen toivottavuudesta vuoteen 2036 mennessä.

Vastaa toivottavuuteen nimenomaan ajatellen Akavan Erityisaloja ja sen potentiaalista jäsenkuntaa.

Perusväittämän lisäksi sinulle esitetään seitsemän tutkimusprosessin aikana kummunnutta ideaa uusista jäsenpalveluista.

Niihin vastataan kahdesta eri näkökulmasta neliportaisella asteikolla:

1) niiden toteuttamisen helppoudesta AE:n näkökulmasta ja
2) niiden toteuttamisen tärkeydestä/toivottavuudesta AE:n tai jäsenen näkökulmasta.

*Pakollinen

1. Robotit ja tekoäly tuottavat valtaosan liiton jäsenpalveluista *

	1 = Erittäin epätodennäköistä/ Erittäin ei-toivottavaa	2 = Epätodennäköistä/ Ei-toivottavaa	3 = Todennäköistä/ Toivottavaa	4 = Erittäin todennäköistä/ Erittäin toivottavaa
Todennäköisyys 2036	☐	☐	☐	☐
Toivottavuus 2036	☐	☐	☐	☐